KINGDOM OF SAUDI ARABIA

MINISTRY OF HIGHER EDUCATION

IMAM MUHAMMAD
IBN SAUD ISLAMIC UNIVERSITY

RESEARCH CENTRE



PROCEEDINGS OF THE FIRST ISLAMIC GEOGRAPHICAL CONFERENCE

VOLUME VI

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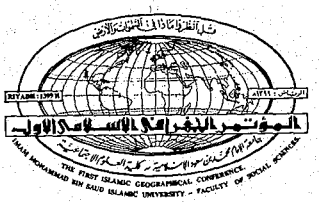
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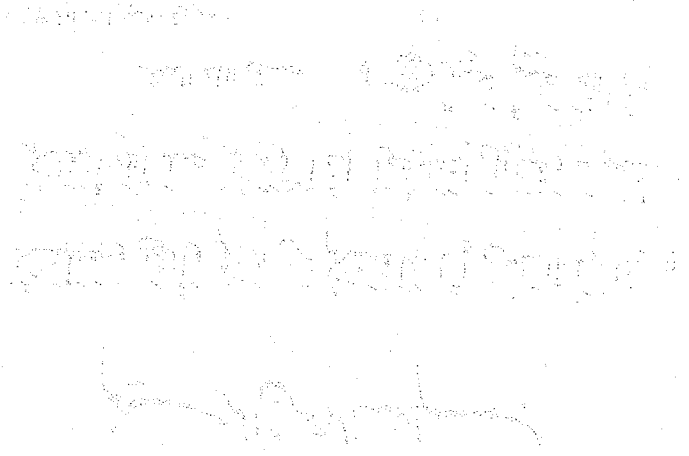
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بسم الله الرحمن الرحيم

﴿ يَٰٓأَيُّهَا ٱلنَّاسُ إِنَّا خَلَقْنَٰكُم مِّن ذَكَرٍ وَأُنثَىٰ وَجَعَلْنَٰكُمْ شُعُوبًا وَقَبَآئِلَ لِتَعَارَفُوٓاْ ۚ إِنَّ أَكْرَمَكُمْ عِندَ ٱللَّهِ أَتْقَىٰكُمْ ۚ إِنَّ ٱللَّهَ عَلِيمٌ خَبِيرٌ ﴿١٣﴾ ﴾ صدق الله العظيم

« سورة الحجرات آية ١٣ »



VOLUME VI

This volume includes 16 papers:
13 in English and 3 in French
15 other papers, written in English
are included in Volume VII.

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Papers written in English.

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BY

MUSTAFA BILGE

INTRODUCTION

The main purpose of this paper is to give some idea on the geographical literature produced during the Ottoman Empire by Turkish Muslim geographers and on the description of rare MSS. avaiblable in the central library of Istanbul University. In the preface,however, important aspects of the development of this literature will be dealt with.

The library of Istanbul University

The library was founded in 1924. At present it is one of the most important libraries in Turkey. It contains MSS., printed books and albums, collected from different libraries. Today there are about 18.600 MSS. and books in the library which consist of books from the library of old Dârulfunûn, Yildiz Palace (Sultan Abdulhamid's II own library in Yildiz Palace previously), Ibnul Ameen Mahmûd Kamal Inal, Sahib Molla, Riza Pasha and Khalis Efendi. Centrally located library building was first built as Madrasa- t- ul- Kudât (school of jurists) and immediately after the abolition of the Madrasa system in Turkey in 1924 it was given to the University of Istanbul as a library. Today it is among the few copyright libraries in Turkey. Including all sections the library has about 7000 Arabic MSS., 10.000 Turkish MSS. and 1615 Persian MSS. There are also some MSS. and printed works in Armenian and Greek(1).

The original works on geography produced by Turkish Muslim geographers are quite considerable. Apart from the original works on geography the maritime literature and travel accounts enriched the Muslims' knowledge, in general, of regional and descriptive geography. The works written for the military expeditions and explorations, commercial activities, pilgrimage to Mecca, missionary zeal, deputation as envoys, official expeditions etc. are to be mentioned here. As for the Turkish Muslim navigators, they had become quite familiar with the winds and the sea charts, and their boats sailed not only along the coasts of the Mediterranean and Black seas but also in the Red sea and direct to the Indian Ocean. With the rise of the Ottoman power in Asia Minor, the Otto-

(1) **For this particular library see the article on "the library of Istanbul University" by Prof. Dr. Nurhan Atasoy, Review of the University of Istanbul, issue 5,pp. 30- 32. For the libraries in Istanbul general see "al- Khazâ' in al- Amma fi Istanbul "by D. Sami al- Dahhân, Madjalla al-Madjma' in Damascus, year 1953, vol. 28,pp. 187- 215. Also see Istanbul Kütüphâneleri Rehberi (in Turkish), by Muzaffer Gökmen, Istanbul, 1951.**

man navy ultimately became very powerful in the Mediterranean. They had, in fact, become intimate with the various stretches of the different seas. They used highly developed sea charts which were perfected originally in the Muslim World.

The Pilgrimage, commerce, wars for fefence and for preaching the right way of Isam "I'lâ- i Kalimatullâh" needed communication, knowledge in cartography, and sea charts. The Muslims from a very beginning knew perfectly well that the earth was spherical. Even the earliest world maps, prepared by Muslims, represent the earth in circular shape. Islam, however, is a comprehensive concept of life and not merely a religion describing the relations between man and his creator. Qur'an says: "He it is who created for you all that is in the earth"[2]. It is also Known that Qur'an urges men to seek for knowledge, to go on exploration and new discoveries: "Say; travel in the land and see the nature of the end of those who were before you. "... Who meditate over the creation of the heavens and the earth (and say) our lord, you created not this in vain"[3].

With the development of navigation among the Turkish Muslims new conquests have been achieved. With a strong military and political power in the Middle East, Europe and North Africa The Turkish Muslim administration acquired considerable importance in the 15th and 16th centuries. The Muslims' urge to explore and conquer new lands was mainly prompted by a desire for Jihad and disseminating Islamic belief in the World and defending Muslim lands against the Christian threat. The books, maps, and sea- charts which had been produced during this period and survived until now clearly show that interest in geography was dynamic among the Muslims.

We also understand from the translations of several books on geography that most of the knowledge was derived from the Arab sources. Muslim geographers in general might have well used the Greek and other sources but they, in fact, made a comparative study on the subjects. One thing is clearly known that the knowledge was open to everybody in the Muslim world and the Turkish Muslims followed the traditional geographical studies in the Muslim World. They studied the works of the famous Arab geographers namely; al- Birûnî, Abu'lFidâ, al- Kazwînî, Yâqût al- Hamawî and the others. In Astronomical li-

(2) **Qur'an, 2/29.**

(3) **Qur'an, 3/191. Urging men to increase their knowledge on earth and sky also see: Qur'an, 31/20, cf.14/32- 33; 16/12; 22/65; 65/11- 12 etc.**

terature, some very important works were produced, and one of the most outstanding astronomers among the Turkish Muslims was the mathematician Ulugh Beg (d. 853/1449). He had an observatory in Semerkand.

The Ottoman Turks do not seem to have begun to write geographical works until the middle of the 9th/14th century. They were always busy in wars trying to establish the unity under one banner among the Muslims in Anatolia. The first of these geographical works were small cosmographies in the style of books of marvels, which studied the wonders of creation. The best Known among them is probably the one Known as "well preserved pearl" "Durr- i Maknûn"[4] by Yazidjioğlu Ahmad Bidjan[5]. He was also the first to make a translation of extracts from an Arabic cosmographical work (written in 857/1453), the 'Adjâ'ib al- Makhlûkât of kazuînî (1203/1283)[6], under the same title, in which the stress likewise is less upon scientific knowledge than upon the wonders of creation.

Sipahizâda Muhammad b. Ali (died in 997/1088) produced a new Arabic edition of Abu 'l- Fidâ's Takwîm al- Buldân under the title of 'Awda al- Masâlik ilâ Ma'rifat al- Buldân wa 'l- Mamâlik with the material arranged in alphabetical order[7]. He completed his work in 980 and presented it to Sultan Murad III. Later on he translated some extracts of his work into Turkish under the same title and presented it to the Grand Vizier Sokullu Muhammad Pasha[8].

Among the translations from Arabic and Persian works we can mention

(4) This work was written by Yazidjioğlu after his work "Adjâ'ib al- Makhlûkât. See Kashf al-Zunûn, vol. III, p. 191.

(5) Died in 860/1456. Also see E.J.W. Gibb, A History of Ottoman Poetry, Vol.I,PP. 389- 391.

(6) The "Adjâ'ib al- Makhlûkât of Kazwînî (1203- 1283). Yazidjioğlu Ahmad Bidjan wrote his work under the same title in 857/1453. See Franz Taeschner, the Ottoman Geographers, Encyclopedia of Islam,p. 587. For the work see Kashf al- Zunûn by Kâtip Cheleby Khadji Khalîfa, vol. IV, P. 187. Also see Osmanli Müellifleri (Ottoman Authors) by Bursali Mehmed Tâhir, vol. I,p. 16. For Yazidjioğlu's work also see Flugel Catalogue, vol. I, P. 618 and Gibb's Ottoman Poetry, vol. I,p.391 (Printed in London in 1900).

(7) See Brockelmann, II., 46.

(8) See Ibid, SII, 44.

"Adjâ'ib al- Makhlûkât[9] which is the translation of khârîdat al- 'Adjâ'ib[10] by Ibn al- Wardî[11], Manâzir al-'Avâlim "Views of the World" by Muhammad b. Omar b. Bâyazîd widely al- 'Âshiq[12]. He completed his work in Ramadan 1006/1598[13]. The work consists of two parts, of which the first "the World Above" that is hell and its inhabitants. The second part is a kind of universal geography containing description of the earth, oceans, islands, lakes, rivers, and springs. It seems that the classification of traditional climates "Akâlim- i 'Urfiyya" have been borrowed from the work of Abu'l- Fidâ i.e. Takwîm al-Buldân. After he left his home in Trabzon (a city in Turkey on the Black Sea coast) he travelled continuously for 25 years most of which he spent in Europe, newly conquered Muslim Lands. He completed his work in Damascus in 1596.

To the category of translated books belong the translations of'Ali Kushdju's work which is written in Persian and translated into Turkish several trimes[14]. 'Ali Kushdju (d. 879/1474) formerly was a director in Ulugh Beg's observatory in Samarkand and later the court astronomer of Fatih Sultan Muhammad II.

In the fields of Marine Geography and Navigation the Ottoman Turks produced original works. In this respect special mention should be made te the work of Pîrî Muhyiddin Reis (d. 962/1554- 55). His work, the "Bahriyya" or as

(9) See Kashf al-Zunûn vol.,p. 132 and the Turkish MSS in the British Museum, Add. 7893.

(10) This work was translated by Mahmûd Shirwânî in 870 A.H. see Osmanli Müellifleri (the Ottoman Authors, vdl. III., P. 316).

(11) For Ibn al- Wardî see Brockelmann II., 131.

(12) He was born in 964/1555. The date of his death is unknown. For his death date Flügel says 1009/1600 see vol. II, P. 431.

(13) See Kashf al- Zunûn vol. II, P. 138; Djihannumâ, p.14. For some texts from the work see Tarikh- i 'Osmânî And jumani asi, year 8, issue nr. 48, p. 322 by khalil Adham.

(14) For the translations of Ali Kushdju's work see ZDMG, year 1923, 40, note 2. One of the translations was made by Saydi Alî Rais who is widely known as Kâtib- i Rûmî (d. 970/1562- 73 under the title Khulâsa- i Ilâhiyya. This work was completed in 956/1549. The other translation was made by Molla Pawîz (d. 987/1579) with the title "Mirkât al- Samâ". See Kashf al- Zunûn vol. 3,p.458.

it is Known "Kitâb- i Bahriyya"[15] has been widely used by Sultan Suleiman in his military expeditions. In this period greater attention was paid to naval geography and many great works have been produced which are, till today, Known and accepted by the world of science. He presented his work to Sultan Suleiman in 932/1525/26 by means of Grand Vizier Ibrahim Pasha[16].

In XVIth century we see another famous name in the Marine Geography and Navigation, Captain Seydî 'Alî (d. 970/1562) known by his nickname as Kâtib-i rûmî with his works entitled "al- Muhît"[17], the Ocean by which he means the Indian Ocean. In another work by him in "Mir'ât al- Mamâlik"[18] on his account of the "region of Sind" and his travels back to the Ottoman territory by land, a hazardous journey that took three and a half years. It is a Kind of travel book which was completed in 965/1557. It gives us important informations on the political, social and grographical situations of some Muslim countries in the middle of the XVIth century. Another highly important work on marine grography also on land geography for the Muslim countries is an illustrated book "Nasûhal

(15) **Kitâb-ı Bahriya is a nautical handbook of the Mediterranean, containing 129 chapters and each one is provided with a map in which he gives an exact description of every corner of the Mediterranean. This book has been published by the Turkish Historical Society, prepared for publication by Orhan Shaik Gökyay, İstanbul, 1935. For this book also see; Kashf al- Zunûn vol. II, P.22; Djihannumâ, p. 11, also see the article by Herzog in the Review of the German Archeological Institute, vol. 27, year 1902, p. 417. Also refer to the articles by Prof. Âfet Inan, Ibrahim Hakki Konyali, and Sadi H. Selen in the Bibliography.**

(16) **See P. Kahle, Pirî Reis und seine Bahriye in Beitrage zur historischen Geographie... Festband E. Oberhummer, Leipzig, Vienna 1929, pp. 60- 76; Idem, Bahriyya, das Turkische segelhandbuch für das Mittelandische Meer von Jahre 1521.**

(17) **Djihannumâ, P. 13. Topographical knowledge in the work have been collected by W.Tomaschek and M.Bittner and printed in Wien, 1897, under the title "Die topographischen kapitel des Indischen Seespigels Mait".**

(18) **A well preserved and beautiful manuscript of this book is in the Library of Istanbul University (see the list in the second chapter, Nr. TY 2426, which is 191 ff.). The book has also been published by Ikdâm library in Istanbul in 1313/1895. See Prof. Abdul-Kadir Karakhan" article in the bibliography. For English translation refer to the book "Travels and Adventures of the Turkish Admiral Sidi Ali Reis during the years 1553- 1556" by A. Wambery, London 1899. There are also French and German translations of the book.**

Matrâkî" [19] entitled "Madjmu'a- I Manâzil" widely known as "Safar- i'Irâkain".

The work known as the "Kitâb- i Bahriya" of the Turkish Muslim admiral Pîrî Reis is remarkable as providing the fullest set known to us of large scale detailed surveys of segments of coasts which, by means of joining overlaps and reducing to a standard scale, were used as the basis for the standard Mediterranean Portolan outline. The book of Pîrî Reis, however, is much more methodical and complete. It includes 223 maps of the Mediterranean coasts and islands, but does not extend to the Black Sea and the littorals west of the straits of Gibraltar; these maps are accompanied by a full contemporary of the Portolan style[20].

At every great mosque there had been an office for the time keepers of prayer. There was also a director among them who had to be an astronomer. They were called "Muwakkit". Muwakkit Mustafa b. Ali of Suleimaniya mosque in Istanbul produced a very systematic work on geography entitled "Tuhfatuzzaman wa Kharîda- t- ul- Awân"[21] during the reign of Sultan Suleiman (XVIth century) in which he calculated the distances of some hundred cities ranging from Istanbul to Morocco and even to China. The geographical locations of the cities also are given in this work.

(19) **For other works by the author see Osmanli Müellifleri (the Ottoman Authors) of Bursali Mehmed Tahir, Vol. III., P. 150 and 305. The author himself was very good in calligraphy and very skilful in picture drawing so that he described briefly and depicted separately the stages of Sultan Suleiman Kanûnî's first Persian expedition in 940- 2/1534- 55. This travel account covers the distances from Istanbul to Tabreez and from Tabreez to Iraq. See Franz taeschner, "the itinerary of the first persian campaign of Sultan Suleiman 1534- 1536, according to Nasûh al- Matrâkî" in Imago Mundi, year 1956, pp. 53- 55; idem das itinerar des Ersten Persienfeldzuges des Sultans Suleyman Kanuni nach Masakci Nasuh, in ZDGM, Zeitschrift der Deutschen Morgenlandischen Gesellschaft, Wiesbaden, year 1961.**

(20) **See; William C. Brice, "Early Muslim Sea- Charts", the journal of Royal and Asiatic Society, London, year 1977, issue nr.1,pp. 55- 56.**

(21) **For this work see Kashf al- Zunûn, vol.II,P. 237; Djihannumâ, p. 12, and also British Museum Library Turkish MSS. by C.Rieu, p. 109, Add. 7896.**

In the XVIth century Kâtip Cheleby's Djihannumâ (the view of the world) is one of the most important and comprehensive grographical work produced among the Turkish Muslims. The complete name of this famous scholar is Mustafa b. Abdullah, but he is commonly Known as Kâtip Cheleby, Hadji Khalifa or Khadji Kalfa (d. 1067/1657). In this work he first describes oceans, rivers and lakes, then starts on lands, beginning with Muslim Spain and North Africa. The lands of the Ottoman Empire are to follow as the main section which he begins with the three imperial capitals, Bursa, Edirne, and Istanbul, followed by the provinces of the European half of the Empire Rumelia, Bosnia and Hungary[22]. When Katip Cheleby completed the manuscript of his work he presented it to Sultan Mehmed IV in 1058/1648[23]. He does not follow the classification of Iklims in Abu 'l- Fida but instead the work is divided into five continents. His work covers the descriptions of peoples, govenments, and the political attitudes in these five continents, yet the main objective of the work is to describe the administrative and political organizations in the Ottoman provinces. He deals with general and physical Geography and gives information on reginonal and descriptive Geography[24]. Djihannumâ is the first of its Kind which deals with systematical geography of the Muslim Lands. After half a çentury we see another work of this Kind in the Muslim World produced by Abu Bakr b. Bahrâm al- Dimashqî (d. 1102/1690) who seems to have borrowed from Katip Cheleby's work. It is a six volumes work which is originally a translation of Atlas Major Presented to the Grand Vizier Adil Ahmad. The Grand Vizier entrusted Abu Bakr b. Bahrâm with the translation of the work. He completed the translation of Atlas Major in six volumes making some additions to many parts of the work[25].

The major work, however, in the field of travel description is the great, ten volume "Travel Book", "Seyahatnâme" of Awliyâ b. Darwish Muhammad Zillî, usually Known as Awliyâ Cheleby. The work is a resume of his forty years travels in every direction throughout the Muslim Lands in the XVII th gentury.

(22) **J. von Hammer translated some part of the work into German under the title "Rumelia und Bosnia", Wien, 1812.**

(23) **See Kashf al- Zunûn, vol. II., p. 658.**

(24) **See the article in Turkiyat Mecmuasi by F. Taeschner also referred to in the bibliography.**

(25) **The work was completed in 1096/1684. The author was originally from Damascus and had been for some time kadî in Aleppo.**

His work is thus a Kind of menoire and contains information on geography. It is a very important source for the history and the geography of the lands[26] This work has been translated into many European languages and also some parts of it into Arabic[27]. It is an accepted fact that Awliya's work is the best example and a very uesful work for the regional geography of the Ottoman period[28].

(26) I have presented a paper to the First International Symposium on the Sources of the History of Arabia held in Riyad under the auspices of the University of Riyad, Faculty of Letters, under the title "Arabia in the work of Awliya Cheleby, the XVII th century Turkish Muslim traveller". For more information see the paper.

(27) For the translations of some parts of the work refer to the Madjalla al- Madjma' al- 'Ilmi bi Dimashq, different issues.

(28) See the article by F. Taeschner on the Geography in the Ottomans. See Bibliography.

Manuscripts on Geography in the University Central Library, Istanbul.

A. Arabic MSS.

AY 27, Takwim al- Buldân by Abu al- Fida 'Imâduddîn Isma'il al Ayyûbî.

AY 127, Silâh al- Idda fî Târîh- i Bender-i Cidde, 20 folios,

AY 141, Dairatulhindiyya by Husain Gusni al- Halkalî with illustration and Kitâb al- Lam' fî 'Ilm al- Hisâb by Ahmad b. al- Hâ'im among the folios from 1 to 41.

AY 325, Sharh -u Ashkâl al- Tasîs fi 'l- Handasa with illustrations by Shamsaddîn Muhammad b. Sharafuddîn, explanations by Musâ b. Muhammad al- Samarkandî.

AY 703, Kitâb al- Handasa, by Abdullah al- Balgrâdî, 227 ff.

AY 740, Risala fî Taksîm- i Gebel- i Lubnân wa halat al- Hukkâm, 17 ff.

AY 856, Hâl al- Tufâha fî 'Ilm al- Masâha by Ahmad b. Muhammad al-Ash'ârî with illustrations copyist Sayyid Yusuf Sâlik in 1202/1787, 17ff.

AY 864, Hulasa- t- ul- Hisâb by Bahauddîn Muhammad b. Husain al- Amilî 23 ff.

AY 1054, Nuzha- t- ul- Anâm fî Mahâsin al- Sham by Abdullah al- Badrî al-Misrî al- Dimishkî, 146 ff.

AY 1225, al- Ma'ûna fî 'Ilm al- Hisâb, 184 ff.

AY 1330, Kurra- t- ul- 'Uyûn fî Ahbâr al- Yaman al- Maimûn, 228 ff.

AY 1345, Al- Latâ'if al- Saniyya fî Ahbâr al- Mamâlik al- Yamaniyya, 85 ff.

AY 1448, Tuhfa- t- ul- Albâb by Muhammad al- Girnâtî, 34 ff.

AY 1524, another copy of the work described in AY 141 beginning from the folio nr.44.

AY 1534, al- Nuzha al- Muhtasar al- Murshida, beginning from the folio nr. 25.

AY 2745, Savânih- u Safar-i Hijaz by Muhammad Bahauddin Âmûlî, beginning from the folio 118 to 122. (This book is in the "Ibnulamîn" section of the library.

AY 2808, Hulâsa- t- ul Wafa bi Ahbâr- i Dâr al- Mustafa by 'Ali b. Abdullah Nuruddîn al- Sanhûrî, 228 ff.

AY 3274, Ahbâr- i Makka by Muhammad b. Abdullah b. Ahmad al- Arzakî, copyist Yahya b. Abu 'l- Kâsim al- Manfalutî al- Balla, 197 ff.

AY 3294, Latâ'if al- Saniyya fî Ahbâr al- Mamâlik al- Yamaniyya, by Muhammad b. Ismâ'îl b. Muhammad al- Kîsî, Badraddîn, written by the author himself in 1093/1682, 91 ff. One volume.

AY 3312, Marâsid al- Ittila 'Alâ asmâ al- Amkina wa 'l- Buka',a summarized edition of Mu'jam al- Buldân by Yakût al- Hamavî, 56 ff. until the word Hujaila.

AY 3488, Kitâb al Iklîl, Hasan b. Ahmad al- Hamadânî, 122ff.

AY 3521, Nuzha- t- ul- Ankâr wa Rawza t ul- Ahyâr, Idrîs b. Hasan, 285 ff.

AY 3595, I'lâm al- A'lâm bi binâ al- Masgid al Haram, Abdülkarim b. Muhibbuddin.

AY 3609, Silsila- t- ul- Tawârîh, 33 ff. ,the first page ornamented with gold.

AY 3715, Sharh Hulâsa- t- ul- Hisâb by Bahauddin Shaih, explanations by Muhammad Bakir Tabrîzî.

AY 4720, Safar min Kûkâ ilâ cihât al- Ganûbiyya, 74 ff.

AY 4790, Al- Sa'âdat al- Mâmiya fî Silsila al- Hadîdiyya al- Gujaziyya, Muhammad 'Arif b. Ahmad Mîr, 152 ff. ,the first page ornamented with gold.

AY 4188, Harida- t- ul- 'Acâib wa farîda- t- ul- Garâ'ib by Omar b. al- Muzaffar Abû Hafsî, 84 ff., beginning is missing.

AY 5924, al- Hazra- t- ul- Unsiyya fî Rihla al- Kudsiyya, by Abdulgani, b. Ismâil al- Nablûsî, 235 ff.

AY 5925, Nabza min sayâha- t- al- Sahra wa'l- Sûdân by European writers, 23 ff.

AY 6220, al- Vâsita ilâ Ma'rifa- t- il- Malta, 279 ff. geographical information on Malta island.

AY 6259, Risala fî Ahvâl- i Misr wa 'l- Nîl, 16 ff.

AY 6333, Nuhba- t- ul- Dahr fî 'Aja'ib al- Barr wa 'l- Bahr, 153 ff.

B. Turkish Mss.

TY 123, Lavâmi' al- Nûr fî Zulmat- i Atlas Minor by Kâtip Cheleby, Mustafa b. Abdullah, with a Map (see f.nr.7.).

TY 226, Hikmetnumâ, Shehrî Asim (1248/1832), with illustrations.

TY 247, Gulshan- i Hulafâ, by Murtazâ Nazmizâde Husain, 247 ff. (see 6076).

TY 450, Mir'ât- ul- Kâ'inât or Harita- t- ul- 'Aja'ib by Husamaddin Bursawî, 10 pieces of picture with colour.

TY 883, Haram- i Sherîf- i Mekkî'ye dâir Risâle, (On Haram-ı Shareef of Mecca) by unknown author 14 ff.

TY 1311, Bahriya Isharatnâmasi (A guide book for navigation), with illustrations.

TY 1394, Manâsik- i Haj by Bahtî with 18 pieces of illustrations, see Mss.nr. 1912.

TY 1471, Takwim al- Tawârîh (a chronology) by Kâtip Chahaby, Mustafa b. Abdullah, with illustrations copied by Ismail b. Ibrahim in 1062/ 1651 in Istanbul.

TY 1545, Kurra Risâlesi Tercümesi (A translation of a geographical book) printed drawings.

TY 1553, Dâira- i Jihannumâ (Darwish Yusuf Tirali) by Bayazid- i Rûmî, with two illustrations of round circle.

TY 1613, Hulâsa- t- ul- Hayat by Sayyid Ali, Kâtib- i Rûmî.

TY 1667, Marifatnâma by Ibrahim Hakki Erzurumî, with a map and illustration, copied by Darwish Osman in 1241/1825.

TY 1749, Irtifa' Risâlesi (Book of height) or Ishakiyya by Ahmad of Brusa, illustrations and drawings, copied by Muhammad b. Hasan in 1132/1819.

TY 1804, Mir'ât-ı Kâinât min Âlât-ı Irtifa' (Mirror of the Universe from the tools of height) by Seydi Ali b. Husain (A famous Turkish Admiral Seydi Ali Reis) with 102 pieces of drawings of the earth, copied by Nuh b. Husain in 1082/1671.

TY 1836, Mi'yâr al- Awkât (Adjustment of times) by Ismail Fahim the son of Ibrahim Hakki Erzurumî, written by the author himself in Tillo in 1193/1779 with some drawings.

TY 1912, Manâsik- i Haj by Bahtî (for another copy of the book see nr. 1394), With 18 pieces of illustrations.

TY 2000, 983 senesine mahsus zayiçeli takwim (A calender for the year 983 of Hijra- 1575- , with 14 miniatures and 55 pieces of different drawings.

TY 2176, Hâsil-ı Haj (a report on Haj), by Hajı Ibrahim Hanif, for another copy of the MS. see nr.TY 3062. It begins from the folio nr. 179

TY 2560, Ilm-i Masâha, (the science of measure) by Ismail Galanbavî, 34 ff., with the author's handwriting.

TY 2350, Lavâmi' al- Nûr fî Zulmat- i Atlas Minor, a translation made by Kâtip Cheleby, 330 ff.

TY 2358, Takwin al- Buldân, 35 ff.

TY 2373, Seyahatnâme- i Hudûd- u Iran (A travel to Iranian Border), by Muhammad Hurshid, 167 ff.

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TY 2426, Mir'ât al- Mamâlik (Mirror of the Countries) by Kâtip Seyyid Ali al- Rûmî, 91 ff.

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TY 4097, Mir'ât al- Mamâlik, by Seyyid Ali. Husain al- Kâfî, among the pages nr. 168 and 181.

TY 4102, Mufassal Coğrafya- Yı Umûmî (General Geography) by Ismail Zuhdî, Edirne 1320/1902, with 21 pieces of colour picture and map.

TY 4123, Memâlik-i Osmâniyyenin Mufassal Coğrafyası (Detailed Geography of the Ottoman Countries, Ottoman Africa), Afrika- Osmânî by Suphî Omar with pictures and maps, 96 ff.

TY 4144, Awliya Chalaby Seyahatnâmesi (The travel Book of Awliya Chalaby the 16 th Century Turkish Muslim traveller).

TY 4160, 66 Kıta'ât- ı Hamse Coğrafyası (The Geography of five Continents) by Rashid Muhammad with pictures and maps.

TY 4191, Coğrafya- yı Umûmî (General Geography), 132 ff.

TY 4195, Mir'ât- ül- Haramain (Mirror of Haramain), by Ayyub Sabrî Pasha, 275 ff. Jazira al- Arab.

TY 4208, Tabuyat ul- Jaysh Atlası, (Mulistary Atlas), 1310/1892, With 25 maps.

TY 4217, Mamâlik-ı Osmâniyya Coğrafyası (Geography of Ottoman Countries) by Tawfik Ali, 346 ff.

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TY 4256, Karadağ Coğrafyası (Geography of Karadağ) by Tawfik Ahmad, 50 ff.

TY 4261, Trablusgarp ve Bingazi ile Sahrây- ı Kabîr hakkında (On Tripoli, Bingazi and the Sahrâ- yı Kabîr) by Suphî Omar, 140 ff.

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TY 4526, Afrika Sahray-ı Kebirine seyahat ve Şeyh Sunûsî ile Mulakat (Travel to great sahara in Africa and interview with Sheikh Sunusî) Sadık al- Muayyad Izamzâda, 226 ff.

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TY 4663, Yaman Vilayatinin ahvâl-i Fanniyasi, (Scientific Situtation of the Wilayat of Yaman) by Dr. Ismail with photos.

TY 4715, Mufassal Coğrafyay-ı Osmânî (Detailed Ottoman Geography), Muhammad Fuad, 98 ff.

TY 4730, Aksay-ı Şarkta bir Cevelân (A travel to far East) by. Mustafa, 180 ff. another copy is in nr.TY 4730.

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TY 4917, Yaman Seyahatnâmasi (Travel book on Yaman) by Halid Hasan, 32 ff.

TY 5002, Trablusgarp, Bingazi vs, yerler hakkında malumat (Information on Tripoli, Bingazi and other places), 129 ff.

TY 5082, Safaratnâma-i Shahî Muhammad, 14 ff. Istanbul 1247.

TY 5091, Arz-ı Filistin Sayahatnâmasi (Travel book of Palestine), Rafet Pasha Muhammad.

TY 5135, Mekse'ue seyahatim (My travel to Mecca) by Kurtulmush zerva, 399 ff. translation.

TY 5279, Küçük Buhara Seyahati (A travel to Buhara) by Paul Raymond translated by Ahmad Ramzi, 160 ff.

TY 5940, Zubda-i Tarih-i Sayyâh by Awliya Cheleby, XVI th century Turkish Muslim traveller whose travel report covers most of the Muslim Countries of today, 499 ff.

TY 5964, Bayân-ı Manâzil-i Safar-i Irakain-ı Sultan Sulaiman Han (Description of the Stations on the way to and from Iraq during the reign of Sultan Sulaiman 926/974 (1520- 1566), which took place in 944/1534. It contains beautiful illustrations and plans). by Nasûh al- Silâhî al- Matrâhî.

TY 5973, Seyahatnâma (Travel report) by Awliya Cheleby, XVI th Century Turkish Muslim Traveller. For another copy of the MS. see nr. TY 4141.

TY 6091, Tuhfa- t- ul- Kibâr fî Asfâr al- Kibâr (A report of Voyages) by Mustafa b. Abdullah, with 4 maps, copied by Ahmad Bosnavî in 1156/1743.

TY 6076, Gulshan-ı Hulafa, Murtaza Nazmizada Husain, 247 ff. for another copy of this MS. see TY. 247.

TY 6282, Devr-i Alemin Ruznâmesi (daily report of a trip around the world) by Sulaiman Shah Muhammad, 146 ff. translation.

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TY 6615, Tarcuma-i Coğrafyay-i Cadîd (Translation of New Geography) Report on the lakes in Syria, Istanbul, and south- east of Europe, 167 ff.

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THE PLANTING AND DIFFUSION OF ISLAM IN AFRICA- SOUTH OF SAHARA

BY

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INTRODUCTION

The trues factor of Islamization lies in the religion of Islam itself. Every Muslim has been asked to carry the message of the Prophet to others. The Prophetic Tradition says: "Preach even if it may be one verse". Wherever the Muslims went, they took their religion and culture with them. The Arabic language formed almost a part of their religion, as the Quran was written in Arabic. There were long trade routes which ran from North to South. The Arab traders, business men and some quiet missionaries who had dedicated their lives to the cause of Islam carried the message of Islam wherever they travelled. It is also true that wherever the Muslim conquests took place a large number of Muslims chose to settle down in newer places.

The period between 660-670 AD was remarkable for the expansion of Islam further into Africa along the Mediterranean coast. Morocco came under Islamic influence in the 8th century and the Berbers began to join the Muslim armies. Islam spread in North Africa with remarkable speed and by the year 732 AD which marked the first centennial of Muhammed's death, his followers were the masters of an empire greater than that of Rome at its zenith, an empire extending from the Bay of Biscay to the Indus and the borders of China, and from the Aral Sea to the lower cataracts of the Nile. The name of the Prophet as Messenger of God along with the name of God was being called out five times a day from thousands of minarets scattered all over North Africa, South- Western Europe, and Western and Central Asia.

Early geographers like Al- Khwarizmi have indicated various names of African territories. The famous Muslim Scholar Ibn Hawqal wrote his book Surat al- Ard in which he has discussed the life- style of the black people.[16] More copious material on West Africa is available from Al- Bakri who wrote in 1067

The Source- Material on Islamic Diffusion in West Africa

The Scholars who wish to write on Africa South of Sahara have to deal with two categories of source material, external and internal. The most reliable external sources are Islamic and some European records, while the internal sources are mostly oral traditions and some later compilations by African Muslim Scholars mostly in Arabic language. The Muslim geographers and historians have provided us with excellent records. The travels of Ibn Battutah will always be remembered as the earliest Muslim scholar to travel through the thick forests of Africa which were named by the Europeans as 'the whiteman's grave even in the early 19th century.

A.D. and later from the works of Ibn Khaldun. The geographical dictionary compiled by Abul Fida and Yaqut between 1212-1229 A.D. gives excellent material on cultural geography of West Africa. Ibn Fadlallah al- Umari's work Masālik al- Absār fī Mamālik al- Amsār which was written between 1342-1349 provides such material on Mali and its surroundings since he had gathered accurate material from people who had lived in Mali.

When the Sankore Mosque University of Timbuktu became a Famous seat of learning in West Africa, it attracted large number of scholars who came and lived in quarters provided in the vicinity of the Mosque. Some works of that period have come down to us while others are lost. The famous African Muslim Scholar, Mahmud al- Kati began to write his magnum opus Kitāb al- Fattāh in 1519 A.D. and died before it was completed. His illustrious son, Ibn al- Mukhtar completed it around the year 1665 A.D. This work provides us with rich material on the Askiya dynasty of the Muslim Empire of Songhay of West Africa. The other famous work of an African scholar is Tarīkh al- Sūdān by' Abd al-Rahmān al- Sa'di who completed it in 1665 A.D.

Spread of Islam in West Africa

Islam reached the Savannah region in the 8th Century AD, the date from which the written history of West Africa begins.[17] The Arab Muslim historians began to write about West Africa in the early 8th century. The famous scholar Ibn Munabbah wrote as early as 738 AD followed by Al- Masudi in 947 Ad. As Islam spread in the Savannah region, it was quite natural that commerical links should also come to be established with North Africa. Trade and commerce also paved the way for the intorduction of new elements of material culture, and made possible the intellectual development which naturally followed the introduction and spread of literacy, and for which parts of the Sudan were to become famous in the centuries to come[18]. In the Kingdom of Tekrur, situated on both banks of the Senegal, Islam was accepted as early as 850AD by the Dya'ogo dynasty. This dynasty was the first Negro people to adopt Islam. It was for this reason that Arab Muslim historians referred to Bilād al- Tekrur as "the land of the Black Muslims". War- Jabi, son of Rabis, was the first ruler of Tekrur in whose reign Islam was firmly established in Tekrur and the Islamic Shariah system was enforced. This gave a uniform Muslim law to the people of that region. By the time the Al-Murabitūn or Almoravids began their attack on Tekrur in 1042 A.D., Islam had made a deep impact on the people of that area. Al Idrisi in 1154 described the Tekrur country as "secure, peaceful and tranquil". The

capital town of Tekrur was also called Tekrur which had become a centre of commerce and merchants used to bring wool to sell there from maghrib taking away with them gold and beads.

We have enough documents about the history of this region as it was known to the Arab historians as the Bilād al Sudān, the land of the Blacks. In the medieval period, the most well- Known empires that grew there are known till our day: the empires of Ghana, Mali, Songhay and Kanem Bornu. Eminent Arab historians have written about the glories of these lands notable among whom are Al- Bakri, Al- Masudi, Ibn Batūtah and Ibn Khaldun. Beside these scholars, there were local scholars whose works have come down to us, as for example Tarīkh al- sūdān, the History of the Sudan, by Al-Sadi and Tarīkh ol- Fattāh by Muhammad al- Kati.

There were famous trade routes like the one from Sijilmasa to Taghaza, Awdaghast, which led to the empire of Ghana and another from Sijilmasa to Tuat, Gao and Timbuktu. There were yet others which connected the present Nigeria with Tripoli via Fezzan to Bornu and Tunisia with Nigeria via Ghadames, Ghat, and Agades to Hausa land. These routes had made all the mentioned places famous trade centres. These centres of trade invariably became centres of Islamic learning and civilization. New ideas came through visiting traders in the field of administrative practices. Now we shall study briefly the expansion of islam in each of the ancient empires of Western Sudan.

1. Islam in the ancient empire of Ghana

The earliest account of the ancient Soninke empire of Ghana that we get is from the pen of Al- Bakri, the ancient Muslim geographer: his book Kitab Al-Masalik wak Mamalik (The Book of Roads and Kingdoms). He has given us information concerning the empire in 1068 when he witnessed in Ghana a highly advanced civilization, politically and materially. It was economically a prosperous country.

The King had employed Muslim interpreters and most of his ministers and treasurers were also Muslims. The Muslim ministers learned in Arabic and were able to record events in this language and could also use the language for correspondence with more distant rulers on behalf of the King. "Also, as Muslims, they belonged to the larger body plotic of the Islamic world and this would make it possible to establish international relations"[18].

Al- Bakri gives the following picture of Islam in Ghana in the 11th century: "The city of Ghana consists of two towns lying on a plain, one of which is inhabited by Muslims and is large, possessing 12 mosques one of which is a congregational mosque for Friday prayers; each has its Imam, Muezzin and paid reciters of the Quran. The town pssesses a large number of Jurus consultants and learned men"[19].

The end of the Ghana Empire came at the hands of al- Murabitun (Almoravids) in the year 1076 AD. The Murabitun movement had begun among the militant Muslim tribes of the Berbers of the Sinhaja. The word al- Murabitun is derived from an Arabic word Ribat which means a sufi monastery. In the 11th century, Tarsina, a Lamtuna leader, went on the Hajj and on his return proclaimed a Jihad on the pagan farmers of Senegal river area. He was Killed in 1023 in this struggle and was followed by Yahya who also went on a pilgrimage and brought with him a famous preacher named Abd- Allāh bin Yasin. Abd-Allah began to preach Islam among the Goddala. Suddenly Yahya died, and Abdallah felt unsafe. He therefore retired into a Ribat where he began to train preachers who were suposed to spread Islam among the Berber tribes. Later he used his men of the Ribat to launch a Jihad. These men of Ribat (monastery) are called Al- Murabitun, meaning the Ribat dwellers which in an Anglicized form are remembered as Almoravids by European writers. The Almoravids comquered Ghana by 1076 AD.

2. Islam in the empire of Mali.

The influence of Islam in Mali dates back to the 15th century when Al- Bakri mentions the conversion of its ruler to Islam. There was a miserable period of drought which came to an end by offering Muslim prayers and ablutions. The Empire of Mali arose from the ruins of Ghana Empire. There are two important names in the history of Islam in Mali: Sundiata (1230-1255) and Mansa Musa (1312-1337). Sundiata is the founder of the Mali Empire but was a weak Muslim since he practised Islam with syncretic practices and was highly disliked by the Ulema. Mansa Musa was, on the other hand, a devout Muslim and is considered the real architect of the Mali Empire. By the time Sundiata died in 1255, a large number of former dependencies of Ghana also came under his power. After him came Mansa Uli (1255-1270) who had made a pilgrimage to Mecca. Mansa (Emperor) Musa came to power in 1312 and his fame reached beyond the Sudan, North Africa and spread up to Europe. Mansa Musa ruled from 1312 to 1337 and in 1324-25 he made his famous pilgrimage to Mecca. When he returned from his pilgrimage, he brought with him a large number of Muslim

scholars and architects who built five mosques for the first time with baked bricks. Thus Islam received its greatest boost during Mansa Musa's reign. Many shcolars agree that because of his attachment to Islam, Mansa Musa could make his best contribution in the field of administration in which new ideas were introduced. The famous traveller and scholar Ibn Battuta came to Mali during Mansa Sulaiman's reign (1341-1360) and gave excellent testimony to the government and administration and economic prosperity of Mali which actually was a legacy of Mansa Musa's policy.

Mansa Musa's pilgrimage proved an advertisement of the enormous wealth and potentialities of Mali which attracted more and more Muslim traders and scholars. These Muslim scholars and traders contributed to the cultural and economic development of Mali. It was during his reign that diplomatic relations were established with Tunis and Egypt and thus Mali began to appear on the map of the world.

Whatever may be said of the expansion of Islam in Mali and other parts of West Africa at that time, the fact remains that Islam was not practised in its pristine purity.

There were many pagan tradional African practices seen in the countries of Western Sudan. Ibn Battuta has described excellent manifestations of the material culture of Islam in the Sudan, like the Id (festival) gatherings in which the preaches which were un- Islamic were also in evidence. Ibn Battuta says that he was shocked by the fact that young women walked naked in the streets taking food to the Sultan during the month of Ramadan. He also descibes the manner in which one appears before the sultan.

"When he calls one of his subjects to an audience, the man removes his clothes and puts on worn- out garments and replaces his turban by a dirty skull-cap. Then he enters raising his garments and pantaloons halfway up his shins and comes forward in a submissive and humble way and strikes the ground high with his elbows.He then stands like one boweing in prayer listening to the Sultan's words. When one of them addresses the sultan and the sultan replies the man removes the garments from his back and puts dust on his head and back like one washing with water".

These tradional practices continued along with Islamic ones. Some of the pagan religious practices were also observed with the Islamic worship. Worship of the local cults and shrines and belief in the local taboos continued in spite of the

fact that Islam had made enormous progress in the bitter- land of the western Sudan Al- Maghilli reports that girls customarily went naked until the time of their marriage in the city of Jenne in the 15th century although Islam was firmly rooted in the area by that time. In Hausa land too we hear of such practices which even continued till the 19th century when Shehu Uthman Dan Fodio launched his Jihad to revive and revitalise Islam. We come to know about some pagan customs through the writings of the Shehu such as covering the head with dust and prostrating before the ruler. The monotheistic teaching of Islam upon prostrating before any one except One God and considers it as polytheism (shirk).

3. Islam in the empire of Songhay

Islam began to spread in the Empire of Songhay some time in the 11th century when the ruling Za or Dia dynasty first accepted it. It was a prosperous region with its booming trade from Gao. By the 13th century it had come under dominion of the Mali Empire but had freed itself by the end of the 14th century and the dynasty was renamed Sunni. The frontier of Songhay now expanded and in the 15th century, under the leadership of Sunni Ali, who ruled between 1464-1492, the most important towns of the western sudan came under the songhay Empire. The great cities of Islamic learning like Timbuktu and Jenne came under his power between 1471-1476.

About Sunni Ali's practice of Islam with syncretism, the Ulama have always condemned him in spite of his contribution to the founding of the Songhay Empire. He was a nominal Muslim and used or misused Islamic Practicies to satisfy his own designs. Once he punished the famous scholar Al- Maghilli, to whom is attributed the introduction of the Qadiriyya fraternity of the sufus, and called him "a pagan" since he persecuted Muslim scholars. He believed in magical practices and local cults. This was not something new in Songhay. Almost the same practice continued in other parts of West Africa until the time the various revivalist movements gained momentum in the 18th and 19th centuries. It is said of Sunni Ali that he tried to compromise between paganism and Islam although he prayed and fasted. The Ulama called it merely a mockery.

Sunni Ali's syncritism was soon challenged by the Muslim elites and scholars in Timbuktu as they denounced the un- Islamic practices of the rulers. Timbuktu then was a centre of Islamic learning and civilization where scholars gathered from different parts of the Muslim world. The famous family of Aqit of the Berber scholars were enjoying the post of the Grand Qadi (Chief Justice) and

were known for their fearless opposition to the rulers. In his lifetime Sunni Ali took measures against the Ulema of Timbuktu (in 1469 and in 1486). But on his death, the situation completely changed and Islam and Muslim Scholars triumphed. Muhammad Toure (Towri), a military commander of Sunni Ali's successor, Sunni Barou, was asked to appear before the public and make an open confession of his faith in Islam. When Barou refused to do so, Muhammad Toure ousted him and established a new dynasty in his own name called the Askiya dynasty. Sunni Ali may be compared with Sundiata of Mali and Askiya Muhammad Toure was like Mansa Musa, a champion of the cause of Islam.

When he came to power, he established Law and arranged a largr number of Muslims to be trained as judges (Qadis) to interpret Canon law. He gave his munificent patronage to the Ulama and gave them large pieces of land as gifts and became a great friend of the famous scholar Muhammad Al- Maghilli. It was due to his patronage that eminent Muslim scholars were attracted to Timbuktu which became a great seat of learning in the 16th century. Timbuktu has the credit of establishing the first Muslim University called Sankore University in West Africa, the name of which is commemorated till to day in Ibadan University where a staff residential area has been named as Sankore Avenue.

Like Mansa Musa of Mali, Askia Muhammad Toure went on a pilgrimage and thus came into close contact with Muslim scholars and rulers in the Arab countries. In Mecca, the King gave him great respect and turbanned him and gave him a sword and the title of the Khalifa of the Western Sudan. On his return from Mecca in the year 1497, he proudly used the title of Al- Hajj[20].

Askia took such a keen interest in the Islamic legal system that he asked a number of questions on Islamic theology from his friend Muhammad al- Maghilli. Al- Maghilli wrote down the answers in detail which Askia circulated in the Songhay Empire. Some of the questions were about the fundamental structure of the faith, such as who is a true Muslim? and "who is a pagan?" when we read Shehu 'Uthman Dan Fodio's works on Jihad, we can see some of his arguments quoted on the authority of Al- Maghilli. In other words, the Jihad of the Shehu in Hausaland was influenced by the detailed discussion and replies Al- Maghilli had given to the quetions posed by Askia Muhammad of Songhay.

After Askiya Muhammad Toure, the empire began to crumble into pieces. He was deposed by his sons who had shared power with him since there was no fixed law of succession to the throne. During the period of 60 years (1528-1591)

eight Askias came to power one after another. At last in 1591 Songhay fell in the hands of the Moors and the glories of Timbuktu began to decline.

4. Islam in Kanem- Bornu Empire.

Kanem- Bornu in the 13th century included the region around Lake Chad stretching as far north as Fezzan. Kanem today forms the northern part of the Republic of Chad. Islam was accepted for the first time by the Kanem ruler Umme- Jimmi who ruled between 1085-1097 AD through a scholar named Muhammad bin Mani who first brought Islam to that land. Umme- Jilmi became a devout Muslim and left on a pilgrimage but died in Egypt on his way before reaching Mecca. It is surprising that Al- Bakri mentioned Kanem as a land of pagans even in the 11th century. Perhaps he meant that a large number of pagan practices also continued along with Islam during that period as we have seen in other West African empires. Al- Bakeri also mentions that there were refugees residing in Kanem Umayyad. They had fled from Baghdad following plans to liquidate their dynasty at the hands of the Abbasids[21].

With the introduction of Islam in Kanem, it became the principal focus of Muslim influence in the Central Sudan and relations were established with the Arab world in the Middle East and the Maghrib. Umme's son Dunama I (1092-1150) also went on a pilgrimage but drowned in Egypt while
for Mecca during the third pilgrimage journey. During the reign of Dinama II (1221-1259) a Kanem embassy was established in Tunisia around 1257 as mentioned by the famous Andalusian historian Ibn- Khaldun (d. 1406 AD). It was almost at the same time that a college and a hostel were established in Cairo, a seat of Islamic learning during that time for scholars going to Cairo in search of knowledge. It was named Madrasat Ibn Rashiq.

Towards the end of the 13th century Kanem became a centre of Islamic knowledge and famous teachers came from Mali to teach in Kanem. By the middle of the 13th century, Kanem established further relations with the Muslim countries and we come to know of Kanem's diplomatic relations with Tuat (in the Algerian Sahara) and with the Hafsid State of Tunis at embassy level. The Kanem scholars and poets could write in the classiclal Arabic language of a very high standard during the 14th century. We have evidence of this in a letter written by the chief scribe of the Kanem court dating from 1391 to 1392.

The historian Ibn Khaldun calls Dunama II as the "king of Kanem and Lord of Bornu" since his empire had expanded as far as Kano in the west and Wadai in the east. The Malikite school of the Islam was firmly established in the Central Sudan region but the pagan practices also continued. The pre- Islamic tradition of the rulers not appearing in public being always behind the curtain continued during Dunama II's time. It is said that Dunama II opened a Talisman (Munni or Mune) which was considered sacred tradional and thus brought a period of hardship to his people. It was due to his enthusiasm for the religion of Islam that he committed this "abomination" (perhaps the talisman was a tradional symbol of divine kingship) and alienated many of his subjects.

In late 14th century, a new capital of the Kanem Empire was established in Bornu at Nigazaragamu by 'Ali bin Dunama, also called 'Ali Ghazi, who ruled during the period 1476 to 1503. This thriving capital continued until 1811 when it was captured and destroyed by the Fulani in 1812. Ali revived Islam and was keen on learning its principles. He used to visit the chief Imam 'Umar Masaramba to learn more about the Islamic legal system. He, by his own example, persuaded the nobility and chiefs to limit the number of their wives to only four.

The Islamisation of Bornu dates from the time of Mai Idris Alooma (1570-1602). We come to know about him through his chronicler Ahmad bin Fartuwa, who wrote about the reign of Mai Idris. In the 9th year of his reign he went on a pilgrimage to Mecca and built a hostel there for pilgrims from Bornu. He revived the Islamic practices which were to be followed by all and sundry. He also set up Qadis courts and Islamic law was introduced in place of the tradional system of customary law. He built a large number of brick mosques to replace the existing ones which were built of reeds.

In 1810 during the period of Mai Ahmad the glories of the Empire of Bornu came to an end but its importance as a centre of Islamic learning continued .

5. Islam in Hausa- Funali land

In 1810 during the period of Mai Ahmad the glories of the Empire of Bornu came to an end but its importance as a centre of Islamic learning continued. Kanem- Bornu. The ruling Mai of Bornu of that time (we do not have any information about the time) welcomed him and gave his daughter, in marriage, to him but at the same time robbed him of his very many followers. He fled from the Mai with his wife and came to Gaya Mai Kano and asked the goldsmith of

Kano to make a sword for him. The story tells us that Bayajida helped the people of Kano by killing a supernatural snake which had prevented them from drawing water from a well.. It is said that the queen of that place, named Daura, married him in appreciation of his service to his people. Bayajida got a son named Bawo from Daura and Bawo had seven sons, Biran, Daura, Katsina, Zaria, Kano, Rano and Gober who became the founders of the Hausa states. Whatever may be the merit of this story, it tries to explain how Hausa language and culture spread throughout the northerm states of Nigeria.

Islam came to Hausaland in early 14th century. About 40 Wangarawa traders are considered to have brought Islam with them during the reign of 'Ali Yaji who ruled in Kano during the years 1349-1385. A mosque was built and a Moezzin was appointed to give Adhan and a Qadi (shariah- judge) was named to give religious decisions. During the reign of a ruler named Yaqub (1452- 1463) one fulani migrated to Kano introduced books on Islamic (theology). During the reign of Muhammad Rumfa (1453- 1499), Islam was firmly rooted in kano. During his reign Muslim scholars came to Kano, and some scholars came from Timbuktu to teach and preach Islam. Muhammad Rumfa consulted Muslim scholars on the affairs of government. It was he who had asked the famous Muslim theologian Al- Maghilli to write a book on Islamic government during the latter's visit to kano in the 15th century. The book is a celebrated masterpiece and is called the Obligation of the Princes. Al- Maghilli later went to Katsina which had become a seat of learning during the 15th century. Most of the pilgrims from Mecca used to visit Katsina and a number of scholars from the Sankore University of Timbuktu had visited the city and brought with them books on divinity and etymology. In the 13th century, Katsina also produced native scholars like Muhammadu Dan Marina and Muhammad Dan Masina (d. 1667) whose works are available even today.

The Jihad literature of Shehu Uthman Dan Fodio, his brother Abdullahi and his son Muhammad Bello speaks of the syncretic practices of Islam of the Hausa Fulanis at the end of the 18th century. The Jihad of Uthman Dan Fodio in 1904 was introduced as a revivalist movement in Islam to remove practices and what Shehu Dan Fodio called Bidāt al Shaytaniyya or Devilic Innovations.

CONCLUSION

This is a short sketch of the spread of Islam in Africa, especially in Africa south of the Sahara. The spread of Islam as well as its resulting distribution of Muslim communities are due to many factors, historical, geographical and psychological, some of which we have tried to outline in this article. Ever since its first appearance in Africa, Islam has adapted itself to the situation prevailing in Africa. The Ulama (the learned men in religion) and the Limanus (Al- Imam) have been Africans right from the time of its spread. Islam has become an African religion and has influnced the social structure, life circle and the material culture of the Africans.

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MUSLIM MINORITI ES
THEIR DISTRIBUTION AND PROSPECTS, WITH SPECIAL REFERENCE TO SRI LANKA

BY

MOHAMMAD IFLAL

THE MUSLIM UMMAH

A citizen of the world does not have to travel all over it or to refer to piles of books to acquaint himself with the people constituting the Muslim Ummah; the gathering at this Conference is sufficiently representative of them. It is the Ummah which gives body and form to the ideal of Islamic brotherhood, which recognises no geographical frontiers and entertains no notions of distinction based on race, colour, language or status. Theories of nationalism, political affiliations and economic systems should not therefore operate as factors dividing the Ummah. The problem of one member of the Ummah should be the concern of every other constituent. Then alone can it function effectively as protector and promoter of Muslim interests in all areas where Islam has adherents. It is a pity that conflicts between Muslim countries or peoples remain unsolved, that unanimity is lacing among Muslim majority communities in their response to the situation of minority Muslims in the Philippines, Cyprus, Eritrea and Thailand and other countries.

THE SPREAD OF ISLAM

On the nature and speed of the expansion of Islam from its heartlands in Arabia to remote corners of the world a vast literature exists. If we touch briefly on this astonishing diffusion, we will observe its early struggle and subsequent flowering in practically the whole of the Arabian peninsula by 632 A.C. when our beloved Prophet, Sayyidina Muhammad, Sallallahu alaihi wa sallam, bade us farewell. We then see it spread from the Atlantic to the Pacific coast, through Persia, Syria, Iraq, Central Asia and North Africa in the next two decades, and moving on to India, Spain and Portugal within a hundred years. Several centuries later,when the world was ready to write off Islam after its confrontation with the Mongols, the Uthmani Turks gave it fresh strength and carried its banner through Europe to the walls of Vienna. If its success upto then was the fruit of victories of Muslim arms, its growth in South East Asia and the Malay Archipelago represents the triumph of peaceful persuasion by the attractions of the faith and the quality of its missionaries, traders and ordinary men.

AREAS OF MUSLIM DOMINANCE AND INSIGNIFICANCE

Annexure "A" gives the figures of Muslim population in two categories: (a) where they form the majority, and (b) where they are minorities on the basis of the definition in the Encyclopaedia Brittanica as "groups held together by ties

of common descent, language or religious faith, and feeling themselves different in those respects from the majority of inhabitants of a given political entity".

Areas of Muslim dominance and variations in size of Muslim minorities can be identified by a reference to Annexure "A" where in group (b) are included as "minority Muslims" massive concentrations of 53 million in India, 14 in U.S.S.R. and 75 in China, while in group (a) are included as "majority Muslims" a few thousand as in the Maldives or Kuwait.

In some countries, notwithstanding preponderance in numbers, the Muslims remain virtually subject to minorities exercising military, political and economic power, while in other countries Islam is non- operational in consequence of secularist or socialist involvement or dependance on other countries for various resources.

FACTORS ACCOUNTING FOR MINORITIES

For the existence of minorities all over the world, racial, linguistic or religious, one or many of varied causes may be assigned. No small part in their creation is played by momentous events in history, exclusivist ideas engendered by nationalism and racism, class- feelings fostered by economic systems, religious extremism or linguistic prejudices and fears.

The smaller Muslim minorities in some countries can be accounted for by voluntary migration for trade or employment purposes, transfer by slave- traders or Colonialists, or spontaneous growth of an Islamic movement within an alien tradition. For the minority status of Muslims in some other countries one may look for reasons in division of political entities, annexation of territories, expulsion of peoples, forced conversions and inaccurate census enumerations.

DISABILLITIES OF MUSLIM MINORITIES

The pattern of disabilities suffered by Muslims as minorities is more or less identical, irrespective of size. However, the larger the minority the more susceptible becomes to constant and vigorous aggression and contempt of rights.

Muslim minorities in the Socialist countries labour under religious suppression; their mosques have been destroyed or put to mundane use; they are not free to preach even among their brothers or to perfom Hajj; they have no con-

tact with contemporary Islamic literature. Even in the countries labelled democratic, state policies with regard to trade and commerce, employment, housing and education operate to the disadvantage of the minority Muslims, as also an environment hostile to Islamic values.

NEED FOR MUSLIM SOLIDARITY

A global organization of Muslim states seems essential if the present insignificance of Muslims in world politics and ineffectiveness in international affairs are to be remedied. Unity of effort in establishing and fostering the Islamic viewpoints on education, government, law, economics and culture at least in Muslim majority countries is a vital necessity. A Muslim commonwealth could function as a source of advice, assistance and influence for solution of problems affecting Muslims everywhere. Apart from building up Muslim morals, it would serve as a check on anti-Muslim policies and intentions. In addition, it could be a centre for collection and dissamination of information covering various fields of human activity. To the Rabitat al - Alam al- Islami is due the largest measure of credit for the present stage of development of the Pan- Islamic idea.

SRI LANKAN SITUATION

Turning now to the situation of minority Muslims in Sri Lanka, which it is my privilege to represent here, some geographic facts concerning Sri Lanka will interest you.

Sri Lanka lies between 5^{O} 55' and q^{O} 55' N and between 79^{O} 42' and 81^{O} 52' E, South-east of India. It is a paarshaped Island 270 miles long and 140 miles wide at its broadest part, with an area of 25, 332 equare miles. It is made up mainly of orystalline rocks. From the maritime coast altitudes rise gradually until in the hilly southcentral part they reach a maximum of 8282 ft. Temperatures at or about sea level in the Southern half range from 79 to 82 degrees Fahrenheit, while in the Northern and Eastern zones the range is from 78 to 86 degrees Fahrenheit, with exceptional maximum of 100 degrees on rare occasions. In the hills the temperatures are much lower. The annual rainfall varies from 75 inches in the South-western coast to about 200 inches in the hills and between 40 and 75 inches in other parts. Annexure "B", Sheet of Resources Maps, and Annexure "D", Climate map, give much information.

References in Arabic by Ibn Shahriyar, Balaadhuri, al- Idreesi, Ibn Battuta and Sulayman at- Tajir, and in English by Tennent and Johnstone, indicate

Muslim settlements in Sri Lanka as early as the 7th century, while sinhala chronicles refer to an Arab connection with sri Lanka even in pre- Christian times. The Muslim conquest of Sind in 712 A.C. is associated with an incident concerning Sri Lankan Muslims mentioned by Baladhuri.

MUSLIM POPULATION IN SRI LANKA

According to the Census figures of 1971, the Muslims in Sri Lanka number 909, 941, representing 7.1% of the total population. Decennial figures indicate a numerical rise from 171, 542 in 1871, through 195, 776 in 1881, 354,200 in 1931, to 724,000 in 1963 and 909,941 in 1971. The percentage of Muslims has been a steady 7.1 or 7.2. According to Annexure "C" showing the Urban and Rural distribution of Sri Lankan Muslims district- wise, 45% of the Muslim population live in urban areas and 55% in rural and plantation areas.

DISTRIBUTION OF MUSLIMS IN SRI LANKA

There is a presence of Muslims in practically every District of the Island but in no District are they in a majority. Annexure "F", map showing district wise Muslim distribution, and Annexure "B", table of Muslim population district-wise, show that their largest concentrations are in the districts of Colombo (187,987) in the West, Kandy (104. 469) in the central hills, Amparai (126-033), Batticaloa (62519) and Trincomalee (62163) in the East. Muslims numbering between 20,000 and 50,000 are to be found in the Districts of Kalutara, Kurunegala, Puttalam, Kegalle, Anuradhapura, Badulla, Galle, Mannar and Matale. Only in Amparai, Trincomalee, Mannar and Batticaloa Districts do they represent more than 20% of the total district population (46.2, 32.4, 28.1 and 24.2 respectively), and are in a position to elect Muslims to represent electorates in those Districts. In the Districts of Puttalam, Kandy, Vavuniya, Anuradhapura, Polonnaruwa, Colombo, Matale and Kalutara, they represent between 6.8 and 10.4% of the total population, while in the rest of the districts the percentage ranges from 1.5 to 4.8.In the urban area of Colombo District live 124,479 Muslims (13% of the Muslim population in Sri Lanka), mostly within City limits, as traders and workers. A socio- economic survey carried out in 1970 (Vide Annexure "D", of Labour force Activity and Unemployment rates for population 15 years and over) reveals that of the Moor Labour Force 7.7 of the males and 35.3% of the females are unemployed. Corres ponding figures in respect of the Malay Muslims of Sri Lanka are 16.9 and 20.0 respectively. This disequilibrium is attributable to the fact that Muslim women Keep out of the labour market unless cricumstances compel, and this may be characterised by economists as a wastage of resources.

THEIR RACIAL COMPOSITION

The racial composition of the Muslim population in 1971 is as follows:

Ceylon Moors	824,291
Malays	41,616
Indian Moors	29,416
Others (Pakistanis, Malayalees, Bhoras, Afghans, Baluchis, Bengalis etc.)	14,519

The Ceylon Moors are, in the main descendants of the early Arab settlers. They were on friendly terms with the Sinhalese and received grants of lands for services as physicians and as allies against Portuguese who between 1505 and 1636 occupied parts of the country. They were originally engaged in trade and navigation but subsequently under pressure of circumstances took to agriculture as well. They were firm in their opposition to Portuguese rule and supplied the Sinhalese with arms and ammunition, and even men, until the expulsion of the portuguese. Under the Portuguese occupation, the Muslims in the coastal areas in the West had a trying time. Their lands were confiscated, their mosques destroyed and their freedom of movement severely restricted. There was a massacre of Muslims in Matara on the Southern coast in 1643 and expulsion of Muslims from other coastal settlements in 1526. These conditions were responsible for Muslim migration towards the central hills and the eastern coast which were under Sinhalese rule. They made a living there, then as now, as peasants and farmers and itinerant vendors of consumer goods. Under the Dutch who folowed the Portuguese, the Muslims could not buy landed property or engage in trade, and were confined to certain parts, and even restricted from performing religious rites. With the arrival of the British in 1796, however, there was an improvement in their condition. Commercial pursuits having necessitated settlements in various parts of the country, they are scattered all over as shown by the District distribution of Muslims, vide Annexure "B".

In 1921 they numbered 251,933 and in 1946, 373,559, a growth of 48.3% in 25 years. In the 50 years between 1921 and 1971, the Ceylon Moor population has more than trebled. The largest settlement is in Batticaloa (85, 373). In the Colombo urban area they number 44,800 and in Galle 9437. Other large groups are to be found in Kandy, Puttalam, Mannar, Amparai, Trincomalee and Batticaloa.

The Indian Moors came from India for trade purposes without general intention to be permanent settlers. They were enumerated at Census with the Ceylon Moors earlier but separately since 1946, when they numbered 35624. Large numbers of them being enumerated as Ceylon Moors, some distortion in the figures of Ceylon Moors and Indian Moors may be expected. 18% of the Indian Moors in Sri Lanka are in the Colombo district.

The Malays who form the next large group of Sri Lankan Muslims are descendants of Javanese princes whom the Dutch exiled to Sri Lanka between 1709 and 1723 and of Malay soldiers brought by the Dutch to man garrisons here. This section of the Sri Lankan Muslims were largely engaged in the Police, Prison and Fire services until recent times, but have now to take their chances with others in the race for jobs. 64% of them are now in Colombo District.

EDUCATION

Taken as a whole, the Sri Lankan Muslims were not singled out for discriminatory treatment in the British period but early Muslim reluctance on religious grounds to send children to Christian Missionary Schools spelt backwardness in education and consequent political weakness and loss of opportunities in employment.

Within the last fifty years, however, they have evinced a deep interest in education and at the present time count a number of doctors, lawyers, engineers, entrepreneurs and officers in Government and Mercantile service.

Education in Sri Lanka is free from the Primary stage upto University level. In all Schools instruction is provided in Islam for Muslim students of all standards, and a Muslim student is not regarded as having passed the General Certificate of Education (Ordinary) Level examination unless he has also passed in Islam. Muslim boys and girls receiving education in Schools in 1976 numbered 183,440 (about 20% of the total Muslim population) as against 2,278,063 others. Schools in which the majority of the students are Muslims are described as Muslim schools, which in 1978 numbered 584. About 700 teachers of Arabic and Islam are employed in Schools where there are Muslim students. Quite a large number of Muslims follow University, Professional and Technological courses. From Annexure "E", it will be seen that 153 Muslims were admitted to Sri Lankan Universities in 1977, representing 3.84%, which is only half of the Muslim population ratio.

ISLAMIC INSTITUTIONS

There are as many as 1400 mosques, About 400 madrasahs for al- Qur'an and elementary Islamic studies are run by Muslim organizations at their own expense. For higher studies in Arabic and Islam, 25 Academies, including one for girls, are maintained, thanks to philanthropic Muslims. The Jamiah Naleemiah, where I am a Senior Lecturer, is one such institution which is making a pioneer effort to integrate secular and Islamic studies and owes its existence by Allah's Grace to Al- Haj M.I.M. Naleem, Justice of the Peace, and a few other brothers.

DISABILITIES AND PROSPECTS

The Muslims of Sri Lanka today do not have as harrowing a tale to relate as those in the Phillippines, Palestine, India, Ethiopia, Cyprus, Burma, Vietnam, Cambodia and Thailand, but that does not mean an absence of serious problems. Sporadic violence against Muslims occurs but such instances are not Government- inspired as in other countries.

Though not specifically directed against the Muslims, administrative and exchange controls, State take- over of some lines of business, State encouragement and support of co- operative ventures, establishment of Corporations enjoying monopolies and credit facilties from State Banks, land reforms, housing legislation and staff recruitment schemes have tended in the last few decades to reduce opportunities for employment of Muslims, to render business enterprise unremunerative and to deprive Muslims of investment- areas which are legitimate by Shariah standards. Since ribah and earnings from trades in certain commodities are haram, and female employment is frowned upon, the Muslims are at a disadvantage as against other communities. The impoverishment of Muslims can be understood in terms of currency devaluations operating as disincentives to savings, housing laws rendering investment in housing hazardous, and credit limitations discouraging business enterprise. Prosperous fields of investment involve transgression of both Islamic and Sri Lankan laws. The policies of the Government now in power promise a fair measure of relief from the strains and stresses to which the Muslims have been subject upto recent times.

Turning to political prospects, it is noteworthy that in the present Government, the Speaker of Parliament, ten Ministers and two Deputy Ministers are Muslims, and the President and the Prime Minister can both be expected to be fair and just by all communites in the Island, but it is a moot question whether

the Muslims could be as strongly represented in Parliament as in the past. Since the Muslims are scattered all over the Island and their votes were crucial in electorates where the two leading parties seeking political power were evenly matched, the Muslims were in a position to obtain reasonable responses to demands, and to have a number of representatives in Parliament. Under the new Constitution, where there will be no representation by electoral divisions but representation in terms of votes cast in favour of contending parties, the return of Muslims will depend on choice by the various parties, in all of which the Muslims have only minimal influence.

The environment in Sri Lanka, as perhaps in some other countries too, militates against total conformity to Islamic principles, practices, values and ideals. Apart from material disadvantages arising from their minority status, the conditions of day- to day life render the moral obligations prescribed by Islam difficult of observance. Public transport is over- crowded and does not ensure segregation of sexes. Public hospitals are staffed by both sexes. In crucial personal situations Muslims would have no option but to take loans subject to payment of interest.

It is true that these facts of life particular to Muslim communities living as minorities are more appropriately matters for discussion at a Jurists Conference, but they nevertheless merit mention here for a proper understanding of the difficulties involved at a spiritual level.

ANNEXURE- "A"

(a) Muslim Population in countries where Muslims form the majority.

Country	Muslims in Millions	Percent
Afghanistan.	.8	99%
Albania.	1.5	73
Algeria.	11.6	92
Bahrain.	(222,000).22	100
Cameroon.	3.6	55
Cent. Africa.	1.2	55+
Chad.	3.0	85+
Dahomey.	1.6	65+
Egypt.	28.1	91
Ethiopia.	15.4	65+
Gambia.	0.4	84
Guinea.	3.1	85
Indonesia.	108.2	94
Iran.	27.4	98
Iraq.	8.2	95
Ivory Coast.	2.2	55+
Jordan.	1.9	91
Kuwait.	0.5	99
Lebanon.	1.6	57+
Libia.	106	96
Malaysia.	5.9	51
Maldive Islands.	0.1	98
Mali.	3.8	80
Mauretania.	1.1	100
Morocoo.	13.5	95
Niger.	3.2	89
Nigeria.	46.1	75+
Oman.	(660,000).66	100
Pakistan.	107.4	88
Qatar.	(180,000).18	100
Saudi Arabia.	7.0	100
Senegal.	3.0	85+
Sierra Leone.	1.4	60+

ANNEXURE. "A"

(a) (cont.) Muslim Population in countries where Muslims form the majority.

Country	Muslims in Millions	Percent
Somalia.	2.6	98
Southern Yemen.	1.4	98
Sudan.	11.7	82
Syria.	5.0	87
Tanzania.	7.4	61+
Togo.	0.9	55+
Tunisia.	4.3	93
Turkey	33.1	98
Union of Arab Emirates.	(200,000). 2	100
Upper Volta	2.9	55
Yemen.	4.9	99

ANNEXURE. "A"

(b) (Cont) Muslim Population in countries where Muslims are a Minority.

Country	Muslims in Millions	Percentage of the Tota Population.
Angola.	1,217,500	25.
Argentina.	295,106	1.4
Armenian S.S.R.	240,840	12.
Australia.	12,000	.01
Basutoland.	70,800	10.
Bechuanaland.	16,650	5.
Bhutan.	35,000	5.
Bulgaria.	1,112,020	14.
Burma.	2,234,200	10.
Burundi.	502,000	20.
Bylorussian S.S.R.	504,780	6.
Cambodia.	57,490	1.
Canada.	29,000	.015
Ceylon.	730,940	7.
China.	75,504,000	11.
Cyprus.	191,400	23.
Congo. (Brazville)	135,000	11.
Fernandopo & Rio Muni.	62,250	25.
Fiji Island.	40,000	,9
Finland.	4,050	.09
France.	761,600	1.6
Gabon.	179,200	40.
Hongkong.	8,525	.25
Georgian. S.S.R.	824,980	19.
Germany.	37,035	.05
Ghana.	2,217,000	30.
Hungary.	50,285	.5
India.	52,995,720	12.
Italy.	35,000	,07
Japan.	47,465	.05

ANNEXURE- "A"

(b) (Cont.) Muslim Population in countries where Muslims are a Minority

Country	Muslims in Millions	Percentage of the Total Population.
Kenya.	1,648,440	19.
Liberia.	750,000	30.
Malagasy Republic.	1,146,000	20.
Malta.	36,190	11.
Mouritius.	115,940	17.
Moldavian S.S.R.	95,160	3.
Mozambique.	1,662,500	25.
Nepal.	356,744	3.8
Newzealsnd.	,500	.02
Nyasaland.	590,000	20.
N. Rhodesia.	382,500	15.
Philippines.	2,969,800	10,
Poland.	609,672	2.
Portuguese Timor.	103,416	20.
Reunion.	69,200	20.
Rumania.	74,724	.4
Russian S.S.R.	7,406,460	6.
S. African Repubic.	170,000	1,04
S. Rhodesia.	582,000	15.
Swaziland.	27,500	10.
S. W. Africa.	10,680	2.
Taiwan	40,000	.35
Thailand.	3,080,000	11.
Trinidad & Tobago.	52,260	6.
Uganda.	1,369,000	20.
Ukranian S.S.R.	5,286,480	12.
Vietnam.	927,870	3.
Yugoslavia.	2,449,330	13,
Occupied. Pelestine.	?	?.
Kashmir.		

- in Kashmir although Muslims are 90% of the population, they are being redused To minority by thier forcible, so- calld "integration" with India.

Source: Commenwealth of Muslim States- C.N. Ahmed Khan.

ANNEXURE. "B"

Muslim Population District- wise and Racial Compostion

District.	Muslims		Ceylon Moors.		Indian Moors.		Malays.	
	Total	%	Total	%	Total	%	Totals.	%
Colombo.	187987	7.0	14793	6.5	7135	.2	26479	.3
Kalutara.	49600	6.8	48841	6.6	465	.1	642	.1
Kandy.	104469	8.8	97286	8.2	4377	.4	3177	.3
Matale.	21825	6.9	20092	6.4	1004	.3	578	.2
Nuwera-Eliya.	9609	2.1	6967	1.5	1301	.3	737	.2
Galle.	22555	3.1	21790	3.9	469	.1	244	.0
Matara.	14960	2.5	14763	2.5	81	.0	100	.0
Hambantota.	7634	2.2	4457	1.2	15	.0	3266	1.1
Jaffna.	15520	2.2	9720	1.4	592	.1	167	.0
Mannar.	21910	28.1	19032	24.4	1846	2.4	18	.0
Vavuniya.	6999	7.3	6381	6.7	284	.3	35	.0
Batticaloa.	62559	24.2	61888	23.7	577	.2	59	.0
Amparai.	126033	46.2	123935	45.4	1158	.4	182	.1
Trincomalee.	62163	32.4	60698	31.6	840	.4	526	.3
Kurunegala.	48881	4.8	45527	4.4	1771	.2	1379	.1
Puttalam.	39548	10.4	37182	9.8	682	.2	761	.2
Anuradhapura.	27274	7.0	25189	6.6	770	.2	316	.1
Pollannaruwa.	11603	7.1	10505	6.4	221	.1	62	.0
Badulla.	24288	3.9	21380	3.5	2386	.4	1729	.3
Monaragala.	4195	2.2	3927	2.1	86	.0	176	.1
Ratnapura.	10218	1.5	8614	1.3	2097	.3	539	.1
Kegalle.	30151	4.6	29074	4.5	1257	.2	453	.1

ANNEXURE. "C"

Urban and Rural distribution of Muslim District- Wise.

District.	Urban %	Rura & Estates %
Colombo.	89	11
Kalutara.	73	27
Kandy.	24	76
Matale.	35	65
Nuwara-Eliya.	20	80
Galle.	74	26
Matara.	47	53
Ambantota.	60	40
Jaffna.	74	26
Mannar.	12	88
Vavunia.	21	79
Betticalloa.	50	50
Amparai.	19	81
Trincomalee.	48	52
Kurunegala.	18	82
Puttalam.	43	57
Anuradhpura.	12	88
Polonnaruwa.	00	100
Badulla.	31	69
Monaragala.	2	98
Ratnapura.	41	59
Kegalle.	34	66

ANNEXURE. "D"

LABOUR FORCE ACTIVITY RATES AND UNEMPLOYMEN T RATES FOR POPULATION (15 Years & Over) BYXRACES & SEX.

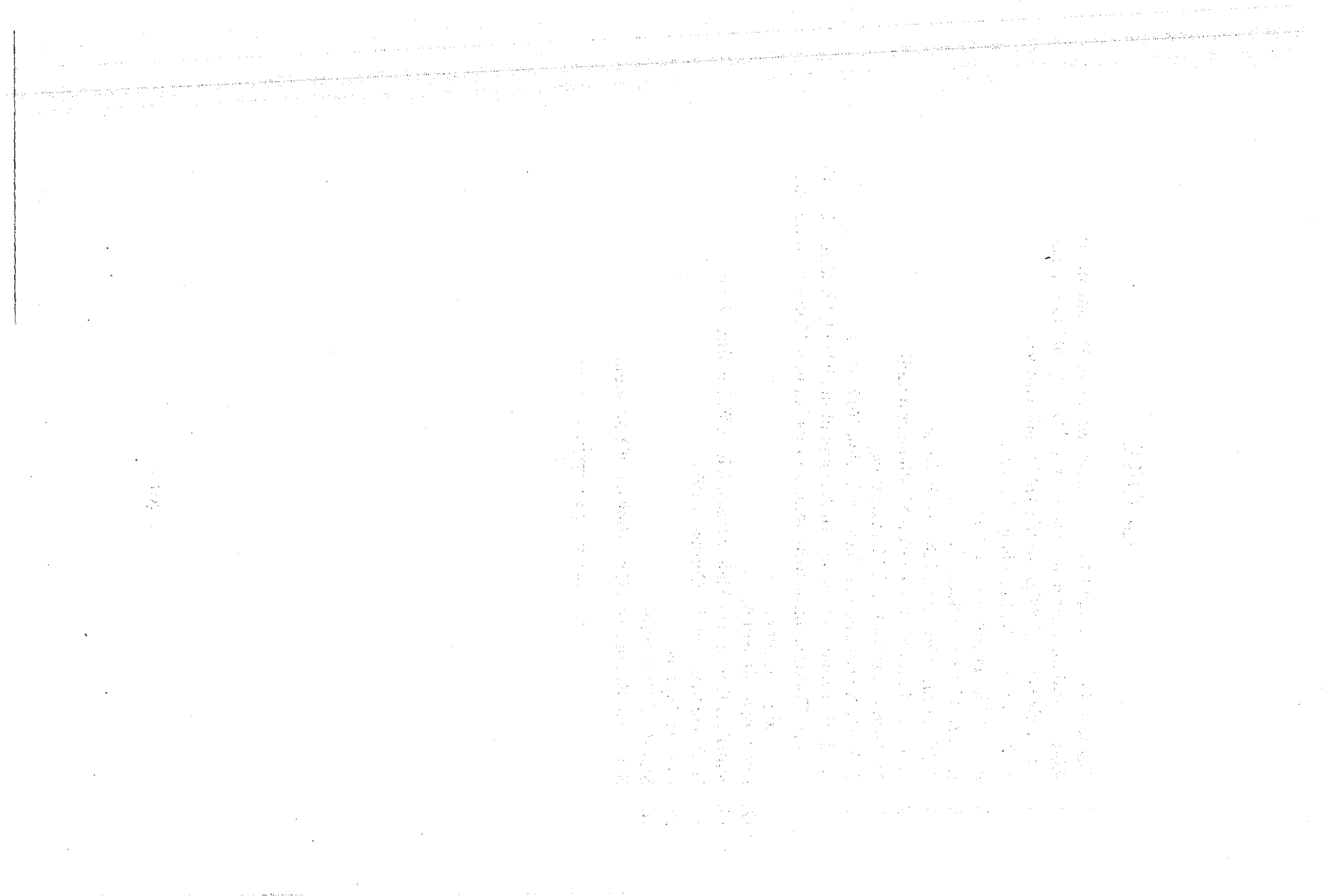
Race.	Labour force activity Rates.	Uemployment Rates.		Male			Female.		
		Unemployed as a % of Labourforce.	Unemployed as a % of Population.	Labour Force activity Rates.	Unemployed as a % of Labour force	Unemployed as a % of Population.	Labour force activity Rates	Unemployed as a % of L.f.	Unemloyed as a % of Population.
All.	34.2	14.0	4.8	50.6	11.7	5.9	17.3	20.8	3.6
Ceylon Moor.	27.3	9,9	2.7	54.2	7.7	4.2	11.3	35.3	3.8
Malay.	31.8	12.9	4.1	50.0	16.9	8.4	18.4	20.0	3.7

Classification of students by course of Study and Ethnic Group.

Course of study.	Sinhalese.	Tamils.	Muslims.	Others.	All.
Arts.	2139	229	112	14	2494
Physical Science. Bio Science & Architecture.	566	179	26	04	775
Medicine.	164	67	09	01	241
Dental Surgery.	38	12	-	-	50
Engineering.	229	55	04	-	288
Agriculture.	79	28	02	-	102
Veterinary.	16	13	-	-	29
Total.	3228	579	153	19	3979
Percentage.	81.125%	14.55%	3.84%	.477%	99.99%

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2. Abd- al- Rahman 'Azzam - The Eternal Message of Muhammad.
3. Dr. Amir Hasan Siddigi - Studies in Islamic History.
4. T. W. Arnold - The Preaching of Islam.
5. Ameer Ali - History of Sarasans.
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7. S. M. Yusuf - Ceylon and the Arab Trade.
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ISLAM IN UGANDA

TRADERS AND TRADE ROUTES AND THE ESTABLISHMENT OF ISLAM IN UGANDA KINGDOM.

BY

D. Ibrahim Z. Sughayaroon.

INTRODUCTION

TRADERS AND TRADE ROUTS

Islam was the first universal monothestic religion to reach Uganda and this occurred around the middle of the nineteenth century. The expansion of Islam in Uganda was largely the work of the Zanzibari traders of the eastern coast of Africa, the "Khartoumi" traders and remnants of Emin Pasha's Sudanese toops. The last two influences came from the north. To the historian, it is evident, first of all, that these traders were more concerned with trade than proselytisation. If they had used their full influence to inculcate Islam during the last quarter of the nineteenth century, the result might have been the islamization of most of Uganda.

The main routes through which the Muslim influence reached Uganda were: -

a) The Southern Route- from Zanzibar and the coastal towns opposite to the islands, to Tabora and from there towards the north to Buganda.

b) The Eastern Route- from around Mombasa towards the eastern side of Lake Victoria and Busoga.

c) The Northern Route- along the white Nile.

Islam penetrated Uganda mainly via these three routes, but not simultanously and not in equal strength. However, the earliest and most important influence which determined the character, the impact and the fate of islam in Uganda came by the Southern Route.

Before the Arabs found their way to Buganda and Bunyoro the trade of these countries must have been limited to the barter of articles absolutely necessary to life. The value of the wares offered for sale, therefore, must have depended on the pleasure of the seller and the greater or lesser need of the buyer, and his means. Money, or any substitute for it, did not exist. But from the moment the first Arabs, Musa Mzuri and Ahmed- Ibn- Ibrahim, entered Uganda at the invitation of Mutema's father, Suna, the state of things changed.

The opening up of the road to Zanzibar, a journey at that time of about five

months by land, offered opportunities for the sale of ivory and slaves. The settlement of Arabs in the country itself, with agents in Karagwe and Unysmwezi, and subsequently on the lake, influenced, of course, the markets of the country[1].

If one was able to question an Arab Swahili trader of Unyanyembs about the destination of commercial traffic leading north in 1850, the reply might have been "all roads lead to Buganda"[2].

The Kabakas of Buganda treated the Muslim traders very favourably and the traders were gratified by the Kabakas protection. Suna's amiable behaviour to the traders and the closing of the Rwanda route were the factors which attracted the Arabs to Buganda. But there were additional motives-among them was the strong central government which could restrain any arbitrary demand of tribute by the chiefs. Arab trade with Buganda was the monopoly of the Kabaka in the beginning. All slaves, cattle and ivory plundered in the wars were brought to him[3]. In practice trade was conducted as an exchange of presents between the monarch and the merchants. The Arabs brought beads, cowrie shells, cloth, glass ornaments, mirrors, clocks, musical instruments like harps and other exotic articles[4]. According to a Muslim local source they presented Suna with a tarbush, a white cap (Muslim headwear), a flag and swords[5]. one of the articles in great demand which the King especially liked were beads. Snay Ibn Amir presented the King with 'among other things, "one hundred funds of coral and other porcelain beads"[6]. The coastal traders found a readymade demand for their luxury goods as well as a surplus of ivory available for export. It was particularly significant that the early Zanzibari traders went without exception to Buganda, especially during the reign of Nutesa 1, 1856 - 84.

As for the economic and material contribution of the penetration of Islam, this was the beginning of the process whereby the Baganda cornered the atten-

(1) Schweinfurth G., (edit)Emin Pasha in Central Africa, (London, 1888) pp. 114- 115.
(2) Holmon, C.F. "Zanzibari influence at the southern end of Lake Victoria" African Historical Studies, Vol. IV, NO. 3 (1971), p. 477.
(3) Zimbe, B., Buganda Ne Kabaka, (Mengo., 1939) "Buganda and Kabaka", p. 72.
(4) Burton, R.F., The Lake Regions of Central Africa (London, 1860), Vol, 11,p. 194.
(5) Kulumba, A., Ebyafayo By "Obusiramu Mu Uganda, (Katwe- Kampala, 1953) "The History of Islam in Uganda" p. 1.
(6) Burton, R.F., Lake Regions, vol. 11, p. 194.

tion and sympathies of many Muslim traders interested in the region. But the Muslim commercial impact seemed to have influenced- in marked contrast to the other negro tribes inhabiting that area- the tribes of the Bantu family more deeply, and this applies especially to the Baganda and the Banyoro whose commerce was at a more advanced stage of development, corresponding to "their higher civilization"[7].

These diverse Muslim traders and craftsmen, greatly assisted by the Nyamwezi, with their capacity of porterage, seem often to have been the first bearers of Islam to Uganda and the lands of the interior. They have at least prepared the ground for a later expansion of their faith, even where they made no efforts at direct proselyitzation. So it is not always easy to distinguish between the Islamising role of Muslim traders and of teachers and sufis since these activities were often combined in the same person in Muslim communities[8]. The combination of commercial actvity with proselytization has always been a conspicious phenomenon on the margin of Islamic territory.

THE ESTABLISHMENT OF ISLAM IN BUGANDA

The first Arab traders were drawn to Buganda out of the same motives which generally pushed them deeper into the interior, the desire to explore new sources of ivory and slaves. The accepted version of their arrival had been that of Sir John Gray who maintained the first one to reach the place was Ahmed Ibn Ibrahim al Ameri[9]. This assertion is based on information given in the Emin Pasha Diaries in which Ahmed informed Emin that his first visit to Buganda took place in 1269 of the Hijrah, i.e. in 1844 A.D.[10].

Notwithstanding the above, it is imortant to note that there are other assortions. Most of the Buganda sources, Christian and Muslim alike, as well as some of the European travellers, including those who met Ahmed and had long talks with him, do not mention Ahmad as having arrived first in Buganda. Apo-

(7) Schweinfurth, G. Emin Pasha in Central Africa, P. 111.

(8) Lewis, I.M., (edit) Islam in Tropical Africa, (Oxford, 1966): p. 20.

(9) Gray, J., Ahmed ibn Ibrahim, The First Arab to reach Buganda, Uganda Journal, vol. 11 (September 1947). pp. 80- 97.

(10) Gray, J.M. Emin Diaries, Ext. 1 Uganda Journal, vol. 25, No. 1, (1961), entry for August 11, 1876, p. 10.

lo Kagwa in his Basekabaka (first published in 1901) mentions the coming of the coastal traders to Buganda for the first time as follows:.

> "When Kayira Suna's Katikiro returned from campaign in Busoga he found that Abalungana[11] Swahilis had visited the king at his capital Nabulagals. There were three Arabs- Kyera, Lusuku and Zigeye and two Swahilis- Muina and Lukabya"[12].

It is interesting to note that in the above question there is a clear distinction between Arabs and Swahilis. Secondly, the names given are neither of Swahili nor of Arabic origin and it seems they were distorted by the Baganda, or, alternatively those are nicknames given by them to the strangers, as the Baganda used to do with many other personalities[13]. Of the five names mentioned, the most famous in other sources, is Zigeye, Burton, when in Tabora in 1857, was told by the Arab trader that: -

> "One of his (Suna's) favourites, who used constantly to sit by him on guard, matchlook in hand, was Isa bin Honayn, a Baloch mercenary of H.H. Sayyid Said of Zanzibar- he had fled from his debters, and had gradually wandered to Uganda, 'where the favour of the sovereign precured
>
> him wealth in ivory, and a harm containing from 200 to 300 women' "Mzagayya"- the hairy one, as he was locally called, from his long locks and bushy beard- was not permitted nor probably did he desire, to quit the country"[14].

Speke given more information about 'Isa. On his way to Buganda in February 1862, he reached a place near Masaka called Kituntu which was said to belong to the Balesch Iseau (probably Isa) :

(11) Gomotoka explained that the name Abalungana was given to the Arabs in Buganda, The origin of the word, he claimed, came from a Buganda phrase "mwana wa bowe mugwana" which means a child of our family, a relative. (Gomotoka, J.T.K., Makula Kye Kitabe Key Ekilangira Kyoloyo Lwe Buganda, vol, 6, p. 2495). This name was given probably to indicate that these early Muslim traders were given a hearty welcome by the Buganda.

(12) Kagwa, A., Basekabaka Be Buganda, (Kampala, 1933), "The Kings of Buganda", p. 91.

(13) For example: Ahmad Ibn Ibrahim "Medi Ibulaimu", (Basekabaka, p. 107).

(14) Burton, R.F., The Lake Regions of Central Africa, (London, 1860) vol. II, p. 193.

"Who came to this country with merchandise, trading on account of Said Said, Late Sultan of Zanzibar : but having lost it all on his way here, paying mahengo, or taxes, and so forth, he feared returning, and instead made great friends with the late King Sunna, who took an especial fancy to him because he had a very large beard, and raised him to the rank of Mkungu"(15).

Ham Mukasa, a famous Muganda historian also claimed that Zigeyo was the first Arab to reach Buganda, He was described among the first group of Muslims who arrived in Suna's time, "he was very hairy and had an enermous beard"(16). He was identified by some Luganda sources as 'Isa Ibn Hussein. James Miti, another Muganda historian mentioned this fact and added further information about the arrival and the activities of these first Muslims in the following;

"About the Year 1848, during the reign of King Sauna Saemunya II, an Arab, penetrated the interior of Africa and arrived in Buganda. He was the first of his tribe to come to these parts. He was, soon after, followed by three other fellow Arabs, Snay bin mir, Isa bin Ushen and Ahmed bin Ibrahim, the second name of whom is said to have found favour with the King. It is further alleged that, as a mark of special affection, the king gave Isa bin Ushen charge of a whole village, called Kituntu in the county of Buddu. To the Baganda of that time he was generally known by the nickname of "Brown" by the dark brown colour of his hair.

Of all these four Arabs, Ahmed bin Ibrahim is said to have been the King's favourite having been the first to instruct king Sauna Saemunywa in the Mohammedan religion"(17).

Suna seemed to have treated the Muslim traders very favourably and they

(15) Speke, J.H., Journal of the Discovery of the Source of the Nile, (London, 1863), p. 276.

(16) Mukasa, H., Simuda Nyuma (Lug: Don't Turn back) Ebiro Bya Mutesa, "The Reign of Mutesas, vol. I (London: 1938) p. 14.

(17) Miti, J., A short History of Bunyoro, Buganda, Toro and Ankole, unpublished typescript, translated into English by G.K. Rock, N,D,P 123. A copy in Makerere University Library, Africana Archives section.

were gratified by his protection.Aas mentioned above,Miti narrated an interesting story about the arrival of Sa'im who, according to him was the first Muslim to reach Buganda 1848. When Sa'im arrived in Kuddu the Pokino sent his messengers to the king informing him of the arrival of some strange looking people who, in appearance, were very much like albinos . The Kabaka welcomed their coming to his capital and then summoned a big assembly of his people to see the strange visitors. The Baganda were surprised and 'especially struck by the queer natural growth of their long beards and their flowing hair of greyish colour[18]. The Arabs and their followers were warmly welcomed by the king and his chiefs, . They were given certain quarter to stay in and presents of bullocks, grains and other kinds of goods. Suna also greatly encouraged the Arabs by gifts and favours to come and trade in his country.

As previously mentioned 'Isa ibn Hussein was even granted a chieftainship[19]. The information which these Muslim traders carried back from Buganda to their colleagues in the trade centre was encouraging, and it is interesting to note that both Burton, in 1857 and stanley, in 1876. stated that the Arabs of Tabora were loud in their praise of Suna for his curtsy and hospitality.

Burton was told that "to a poor trader he (Suna) has presented twenty slaves and an equal number of cows without expecting any but the humblest return"[20]. While Suna was known to be cruel in the treatment of his subjects, to the strangers, Stanley was informed, he was "most liberal and hospitable and many Arab traders have had cause to bless the good fortune that conducted them to Uganda in the days of Suna"[21].

Some of these Muslim traders must have been very remarkable men and worthy of respect. Among these Muslim traders the immense impact of Ahmed ibn Ibrahim will always be of special significance in the story of Islam in Uganda. He was an interesting Muslim Arab trader, of a good social standing. He seemed to have won the confidence and impressed such Europeans like Burton and Stanley. The latter met him on the 15th, of February 1876, in Karagwe and gave the following account of Shaikh 'Ahmad :

(18) Ibid.

(19) Burton, P.F., Lake Regions, vol. 11. p. 193.

(20) Ibid.

(21) Stanley, H.M., Through the Dark Continent, (London, 1878) vol. 1,p. 363.

"He is a fine, gentlemanly- looking Arab of light complexion generous and hospitable to friends, liberal to his slaves, and kind to his women. He has lived eighteen years in Africa, twelve of which have been spent in Karagwe. He has known Suna, the warlike emperor of Uganda and father of Mutesa.He has travelled to Uganda frequently"[22].

These early Arabs who had arrived in Buganda brought with them more than their cotton goods, metal work firearms. Apart from their merchandise, they brought their Islamic religion. Sir Apolo Kagwa tells an interesting episode, when the voice of Ahmed ibn Ibrahim was raised to good effect. Like his predecessors, and like his son and successer, Suna frequently ordered large scale executions of his subjects in propitiation of the deities of the Ganda traditional religion. Once such orders were given by Suna in Ahmed's presence, Ahmad at once rebuked the Kabaka for killing his subjects: 'My lord, those people whom you are slaughtering everyday were created by God who created you and gave you your kingdom' Kabaka Suna rejected the idea, stressing that his gods (Balubalo) gave him his kingdom, but Ahmad Ibn Ibrahim courageously repeated this idea about God until one day Kabaka Suna asked Ahmed, "Where is God that you keep talking about and who is supposed to be greater than me" Ahmed then explained that the God he talked about was in heaven and that he would resurrect all those who loved him. Suna became impressed by these ideas and requested Ahmad to teach him something of this religion, in which there is no room for the cult of personality, and Ahmad complied with the king's wish. In his article in Mongo Notes, Kagwa stressed two ideas which Ahmad especially emphasized to Suna, the belief in one God and the concept of resurrection and paradise. Kabaka Suna asked Ahmed "Is there a God greater than I ?" and Medi told him that there is a God who will raise up all who believe in him and they will go to paradise[23].

Perhaps many of those present who heard Ahmad's speech, expected to see him sharing the fate of the vicitims, whose cause he had thus defended. On the contrary Suna appeared to have been much struck by the boldness of Ahmad and asked to be taught the tenets of the Muslim faith. This again demonstrates the favourable attitude of Suna to the coast traders in general and to Ahmad in

(22) Ibid., p. 453.

(23) Kagwa, A., Ekitabo Kya Bika Bya Baganda, (Kampala, 1949), "The Clans of Buganda", p 116, See also Mengo Notes, vol. 3., No. 5, (May, 1902). "How Religion came to Buganda".

particular. Ahmad Ibn Ibrahim expounded to Suna some of the elementary principles of Islam and taught him before the latter's death, four chapters of the Qur'an.(24).

The few available Muslim sources confirm the traditions mentioned in Kagwa's books with slight changes. Katungulu for example, claimed that Suna learned seven chapters(25) while 'Ali Kulumba mentioned that the Arabs, before they left Suna had given him a copy of the Qur'an which he kept with him(26).

There is another evidence of a Muslim sacred book in Suna's possession. Chaillo- Long, whom Gordon sent to Mutesa in 1874, stated that the Kabaka asked him to bind a "Voluminous Arab manuscript worn out and discoloured by age. This book was highly revered and had been given to him by the king Suna his father"(27).

Although Suna proved a ready listener to Shaikh Ahmad, but it is difficult to claim that Suna had died a Muslim. The accepted Muslim opinion is that Suna took great interest in Islam during the presence of his instructors, especially Ahmad ibn Ibrahim. It seems that Suna's interest in Islam had waned rapidly after the departure of this prominent Muslim trader. Apolo Kagwa also admitted that Suna at one time was very much influenced by Islam stressing that "it is possible that if he had not died so soon Suna would have probably taken the Muhammedi religion"(28).

Although Islamic influence was little during this period, it is clear that Suna took a genuine interest in certain Islamic ideas such as the belief in one God and resurrection. Thus in Suna's time we notice the initial stages of a process of Is-

(24) Kagwa, A., Base Kabaka, p. 106.

(25) Katungulu, M.M., MSBI, 2 Islam in Buganda, translated into English by Mr. Busulwa- A copy in Makerere University Library.

(26) Kulumba, A., Ebyafayo By "Obusiramu Mu Uganda, (Katwo- Kamplala, 1933) Shaikh" Ali also claimed that Kabaka Suna believed in God and read about 6 chapters.

(27) Chaillo Long, C, Central Africa, (London. 1876), p 120.

(28) Kagwa, A., Ekitabo Kya Bika, p. 116.

lamisation by peaceful penetration of traders into a centrally organized state.

Shaikh Ahmad ibn Ibrahim was undoubtedly one of the prominent figures who brought about this great change, He appeared to have died in the latter part of 1885. He was only one among many of the Muslim traders who brought something more than their trading activities in the interior of East Africa. They were pioneers both as creators of many markets in Central Africa which gave stimulus to commerce, and prosolytes of the Islamic faith. Sir J.M. Gray concluded his comments on Shaikh Ahmad's career by saying: -

> «The man who risking his own life to save the lives of others...One who stood up to administer a bold rebuke to Suna, deserved a kindlier fate than that wgich befell (being killed). One feels he should not be allowed to be unmered amongst 'those who have perished as though they had never been borne' but should raould rather be remembered amongst those 'merciful men whose righteousness hath not been forgotten''

Thus in Suna's time, the process of Islamisation went no further than what we have discussed. Nevertheless, these developments paved the way for extended Islamic contact which was to take place during the reign of Mutesa 1.

Kabaka Mutesa 1 came to the throne after the death of his father Suna in 1856. The Arab Muslim traders tried to do all they could to teach him Islam, especially after they had noticed his deligence in everything he was learning.It seems that the newcomers to Mutesa's court were a new type of traders with missionary zeal. Stanley names as the principal of these missionaries Muley bin Salim who found in Mutesa an apt and ready listener(30). Mutesa's zeal for Islam was also motivated by a political factor, mainly to please the Sultan of Zanzibar so as to strengthen and enrich his country through the commercial dealings with the Zanzibari traders. Moreover many of the Baganda at this time seemed to have been far from being satisfied with the grosser forms of superstition which surrounded the traditional religion and that they were anxiously looking for some better form of worship. To them the religion of the Arabs made a real appeal and they embraced that faith from a true sense of conviction. Ham Mukasa tells us that Mutesa's profession of enthusiasm is shown by the following: -

(29) Gray, J.M., Uganda Journal, vol, II (1947), pp. 80- 82.
(30) Stanley, H.M., Through the Dark Continent. vol. 1, p. 194.

"Having learned Islam he called his chiefs and told them how good this religion was, that there is only one God, called the great, God the Omnipotent, Hakibalu[31], who is greater than all the spirits. 'I want you all to study this religion' he told them, and tried to teach them what he had learned, explaining to them the meaning of what he had read from the Bible of the Muslims, called Koran. His chiefs replied "You,Sir,have more wisdom than we in understanding difficult things such as these. If you appreciate and accept them, so do we. Let us embrace the religion, since you are there to teach us to know all and to understand about God"[32].

Then the Kabaka ordered all the people to pray regularly. Thereupon his chiefs said to him: "Learning this religion and loving its books after the example of your Majesty will replace the hunting of animals, and your chiefs together with all your people will certainly learn to love this religion like you"[33].

Mutesa went to considerable lengths to spread the impression that he really meant what he had announced. We are told that orders were given to build mosques in all the counties and for a short while it looked as if the whole country was going to embrace the religion. Sir Apolo Kagwa went on to say that Mutesa introduced the Muslim calendar and announced that it was a criminal offence for his subjects not to greet him or each other in the Arabic fashion and with the appropriate Arabic words. The Muslim influence appeared to be greatly on the increase and several swahilis were appointed to chieftainship[34]. According to Ham Mukasa Mutesa's zeal as a Muslim was such that he promulgated a law which forbade non-Muslims to succeed their fathers or relatives[35].

Islam gained more and more ground to the extent that the failure to have the stone used for Muslim prayers in one's courtyard meant endangering one's own life, because it would be disobedience to the royal command. Some orders were given to be kept by all, whoever transgressd them would be convicted or could be put to death. These were the orders: -

1 - Everybody had to pray in the Muslim manner during the time for Muslim prayers.

(31) Hakibalu, Arabic for Akbaru- the greater.

(32) Mukasa, H., Simuda Nayuma. p. 15.

(33) Ibid.

(34) Kagwa, A., Baskabaka, p. 139.

(35) Kukasa, H., Simuda Nayuma, p 16.

2 - Everybody had to fast during Ramadan.
3 - Everybody had to greet with the Muslim greetings.
4 - Eating Kaffir meat was forbidden that is which was not slaughtered by a Muslim religious man (Mwalimu) or a reader who is well versed in the Muslim faith"[36].

Only circumcision was not obligatory because the Kabaka himself was not circumcised[37]. Everyone was free to be circumcised for the sake of his faith. Thus, many came to be circumcised without being forced to undergo this rite, and thus became Muslims of their own choice and not because of the Kabaka[38]. For a time it looked as if Kabaka Mutesa would stop at nothing short of a Muslim revolution. To show the extent of his religious devotion Apolo Kagwa further informs us of Mutesa's reforms and measures to uphold the cause of Islam:-

> "Before the return of the expedition, the King began to observe his ninth Ramadan in 1875, On the following day, there was a mass arrest of all people who did not practice Mohammedanism. The King ordered all the chiefs to hand over to him all the "unbelievers". The chiefs arrested very many people on the pretext that they were unbelievers... All the captives were taken to Nakinzira execution place and done to death... From that time forward, the whole country became very devoutly Mohammedan and many more mosques were built in every village"[39].

A host of messengers were sent out everywhere in all the counties and they arrested a lot of people, perhabs two thousands or more, and killed them in various cruel ways, burning, spearing and drowning them on the ground that they were pagans, that they had refused to embrace the religion ordered by the king for all his subjects.[40] Many, in fact. who did not care for the religion before were terrified by the massacre of their fellow men and started learning the Muslim faith. They started putting stones in their courtyards, making boards on

(36) Ibid., p 15.

(37) Mutesa was never circumcised because there was a traditional horror in Bŭganda of shedding the royal blood and submission to this rite might have lost him his throne.

(38) King, N.Q. (edit.(Notes Introductory to the Study of Islam in some Parts of Uganda, p. 7- Makerere University- Depart- ment of Religious Studies papers.

(39) Kagwa, A., Basekabaka, p. 140.

(40) King, N.O., (edit(, Notes Introductory to the Study of Islam. p. 8.

which they could learn how to read, and making mats to pray on in order to be considered religious. All the while this was a means of saving their lives and not any interest in the religion as such. Some of the ardent believers among them, perhaps,liked this way of treating the people, hoping that it would help to spread the Muslim religion and would increase its influence in all the country[41].

Not only this but it seems that Mutesa even started a missionary activity for propagating Islam beyond his borders as he sent the following message to Kabarega, Mukama of Bunyore:

> "My brother, I have sent you these two teachers, whose names are: Sabddu who was Mujasi (Commander of the forces)... and Mwanga Sabakai to teach you the good words of Good (Allah) who is greater than all the spirits and who governs heaven and earth and that the end will come come when allmen will be judged. I therefore do not like you, my brother, to be among those who will be condemned on that day of judgement"

The Messengers were sent back with a polite intimation that Kabarega did not believe in resurrection and the day of judgement. Kabarega also asserted that he had his own gods whom he worshipped and with whom he was quite satisfied[43].

Kabaka Mutesa felt very sad on receiving this and said:

> "I am very sorry that brother of mine has rejected the religion of God and has confided in his own dignity and his gods alone and that he thinks only in terms of this present life which he compares with the life to come. Let it be so, but I feel sorry for him to remain in the ancient customs of the balubale whom we called gods while there is the true God, the greater. You, my subjects, however, persevere in the religion. 'Unanimously all the chiefs replied:' We shall persevere thus: and since you are our leader, we will follow you wherever you go[44].

(41) Ibid.

(42) Mukasa, H., Simuda Nayuma, p. 17.

(43) Mukasa, H., Some Notes on the Reign of Mutesa". Uganda Journal, vol. 1, No. 2 (1934). p. 130.

(44) Mukasa, H., Simuda Nayuma, p.18.

From this one can draw the following conclusions:

The Muslim faith seemed to have spread among the Baganda to such an extent that Baganda Muslim teachers were propagating it in the neighbouring provinces. Secondly, it appears that Kabaka Mutesa himself was leading the Muslim movement, a thing which undoubtedly gave it further prestige and vigour and helped considerably in the spread of Islam among the Baganda and the neighbouring tribes(45).

It is also important to note that by the end of Mutesa's reign the Baganda Muslims had come to occupy important posts in the country's administration. They were headed by such remarkable men like Muguluma who held the position of Kutabalwa, deputy chiefdom of Baddu: Kapalaga, the Mugasi and Tebukoza who died fighting for the Muslims in the civil wars. This has undoubtedy increased the chances of the spread of Islam among a large section of the population. Moreover, as Christianity arrived too late in Mutesa's reign, and made many demands upon its converts, it could not secure a position camparable with that of Islam. According to Michael Wright:

> "By the end of his reign the Christians could boast of no chiefs as eminent as Muguluma and Kapalaga. The only Christian leader of later years who achieved substantial office under Mutesa was Yosefu Nsingisira, the Catholic who was Mutesa's Mutanda of Bulemezi"(46).

Islam was, thus, the first universal monotheistic religion to reach Uganda. It was established in Buganda earlier than in other areas and among other tribes. The history of the introduction and expansion of this religion would be shaped by the central role that the Baganda will play in the political development of the whole country. As we shall see later the establishment of the Uganda protectorate under British rule gave Buganda, a highly- organised African Kingdom, a unique status. The colonial rule's encouragement and the favours it showed to the Baganda administrative system may have increased their prestige in the eyes of the other tribes, thus facilitating their chances of spreading the teach-

(45) Although Mutesa had shown all this religious zeal, there is no indication that he died a Muslim. Many sources give the impression that he died uncommited, But Hajj'Abd Allah Sekimwanyi, a Muganda Muslim historian, who was a page at his court, claims that Mutesa died a Muslim: (See Sekimwanyi, A. Ebyfayayo Editonotono Ku Dini Ye Miyisiamu mu Buganda, (Kampala, 1947), "A Short History of the introduction of Islam into Buganda", pp. 2-3.

(46) Wright, M., Buganda in the Heroic Age (Nairobi 1971), p. 9.

ings of both Christianity and Islam. This does not imply that there is any record of compulsory conversion. It seems to me that the process of Islamisation was greatly assisted by the immense impact of the Baganda and the influence of the Swahili adminstrative assistants and artisans. The vanquished, says Ibn Khaldun, "always seek to imitate their victors in their dress, insignia, belief and other custom and usages"[47].

(47) Issawi, C., (edit.) An Arab philosophy of History, (London, 1950-, p.53.

MUSLIM MINORITIES IN SOUTH AFRICA

BY

HOOSAIN SOLOMAN

INTRODUCTION

There is an awakening amongst the Muslims of the world- an awakening which non- Muslim historians have been taking note with alarm, as they too will realize the resurgence, renaissance and potentialities of the Muslims under the banner of the Holy Quran.

Professor G. Antonoff says: "Islam is the religion of the universe. Islam is the destiny of mankind. That destiny must come to fulfilment sooner or later. Muslims carry a great responsibility on their shoulders in that respect. And the earlier they awaken to it the better for them".

SOUTH AFRICA

The country lies between the latitudes 22° and 45°, varying from sub- tropical to Mediterranean climatic conditions. Its neighbours in the north are Mozambique, Rhodesia, Botswana and South West Africa (Namibia). The country covers an area of approximately 1 1/4 Mill

Climate

South Africa has one of the sunniest, most pleasant climates in the world. The Western Cape has a Mediterranean climate with dry summers and rain in winter. The rest of the country lies in the temperate zone..

Short History

In 1652 Jan van Riebeeck arrived at the Cape of Good Hope in the service of the Dutch East India Company to set up a refreshment station for passing Dutch ships on their way to the East. It was on these ships returning to the Netherlands around the Cape of Good Hope that the Dutch authorities sent the first large group of Mujahidun who fought against the Dutch imperial power

and whom they considered a threat to their commercial empire in the East Indies. Among these Mujahidun were prominent men.

The Cape was a bone of contention in the Napoleonic wars and in 1806, the Cape finally became British so that the period of Dutch rule came to an end.

The 19th Century was a time of violent expansion by the indigenous Xhosas, Zulus, Afrikaners (Dutch settlers) and the British. The Africans were defeated by the superior firepower and the Afrkaners were eventually subdued by the British at the end of the century.

At the same time, as the Settlers encroached upon the lands of the indigenous people, missionaries also came and many Xhosas became Christian.

In Natal we find the Ngune and Zulu tribes.

The final conflict between the British and the Dutch came with the terrible South African War of 1899- 1902 (known in Britain as the Boer War). In this war the Afrikaners were subdued and this struggle brought out a fierce Afrikaner National consciousness which still survives.

After the war, Britain quickly made concessions and by 1910 the selfgoverning Union of South Africa was established. The Afrikaners were now free and when in 1948 they won the general elecations they embarked on their policy of

Apartheid

This policy with its doctrinal objective of "separate development" of the main racial communities, aimed to preserve the status quo of the idea of permanent white supremacy over two thirds of the country. The other third is to be divided up into ten Black Homelands with their own vague form of separate independence.

In 1961 South Africa's racial policies were so far out of step with the multi- racial Commonwealth of Nations that it was forced to withdraw. It consequently became a Republic on 31 May 1961.

Present World Status

During the 1960's South Africa's economy was growing at a very high rate, rivalling that of Japan.

Minerals form half the total value of exports with agricultural products making up most of the rest and South Africa still provides up to 60% of the world's gold production.

South Africa is the most highly urbanized and industrialized country in the continent which was made possible mainly as a result of its rich mineral resources and its extensive network of communications and power. It is also largely built on the exploitation of black labour.

POPULATION

The Total population is between 21 and 22 million. The bulk of the population is officially classified "non- white", comprising African, Coloureds and Asians. The majority of the Asians are Hindus, settled in Natal.

Two out of every three South Africans are black (15 millions) belonging to a number of ethnic groups each with its own language. Officially they are designated as Bantu, a word meaning people because the government regards African as a liberal term.

Under the policy of apartheid- also known as "Separate Development"- the entire country has been divided into racially exclusive areas to keep people socially apart. Over 87% of the land is designated for white occupation and is known as the "white area", these are the reserves which have been divided into eight "Bantu Homelands" which are supposed to achieve their separate independence in the future. Every village, town or city is sub- divided into separate areas reserved exclusively for one of the four racial groups. It is a crime for a member of one group to live in a different racial area.

Muslim Population

The Muslims of South Africa come from two countries of origin, namely India and the East Indian islands of Java, Borneo and the Malayan Peninsula.

The first Muslims arrived at the Cape during the second half of the 17th Cen-

tury. when they were banished here from the far East. The Dutch Commercial Empire in the East Indian Islands was threatened by fierce rebellion and fighting by the indigenous population. Leading members of the resisting forces who were both learned and of aristocratic society were the first whom the authorities banished to the Cape of Good Hope during the last half of the 17th Century.

During the 19th century when South Africa was under British colonial rule, thousands of Indian workers were brought out to the shores of Natal to work on the sugar plantation and amongst them were many of the first Muslims from the Indian Sub- continent.

Areas of Distribution in the Country

At present more than 60% of the Muslims of South Africa are settled in Cape Town and surrounding areas. The rest of them are distributed in Natal, Transvaal and the Eastern Cape Province.

Occupations of Muslims

For many years many Muslims have been engaged in the building trade as artisans, namely, as bricklayers, carpenters and plumbers. A big percentage have also engaged in trade and commerce.

Muslims in the Transvaal and Natal are mostly engaged in trade and the prosperity it has brought to the community, has enabled many to excell themselves likewise in the educational field.

Anti - Islamic Forces and Resultant Problems

The Muslims are a world community. This means, above all, that Muslims are to be found as minorities in most countries. For a Muslim living in a non-Muslim environment is particularly hard. Therefore the problems that arise under unsympathetic if not outright oppressive governments are basically the same.

In predominantly Western environments, there is the problem of an adequate and wholesome Islamic Education.

We have to rid ourselves of the hold of modern Western disciplines and philosophies and aim at re- interpretation leading to the development of the true Islamic personality and attitudes.

Education is also the development of the intellectual faculties of the individual which results in certain attitudes and value judgements.

The problem of the minorities and perhaps of certain Muslim countries also, is that all modern Western disciplines and philosophies have on the minds of the educated Muslims of today.

Recent Developments and Planning

In South Africa we have lived in a Western Cultural- intellectual environment for over three centuries and over the years have always been aware and very well acquainted with its pitfalls, deficiencies and short- comings and have striven hard to fortify ourselves against the morally corosive evils of the West. However, the dire need today both for the minorities and Muslim countries, is the re- interpretation of modern science and use of technology.

The Madrassah alone cannot provide the much needed intellectual milieu for the Muslim youth to develop.

Although the importance of the Madressah can never be underestimated in the life of the minority community a stage has been reached where the Maddrassah needs to be re- organized.

Muslims trained in the "Western" disciplines together with a wide and extensive knowledge of Al- Quran and Sunnah should be in a position to re- organize an educational framework for the community.

Since 1972 Arabic language and Islamic studies depatments have been established at the University of Durban Westville and the University of the Western Cape.

Islamic Activities of Muslim youth

In recent years there has been a resurgence of Islam amongst the youth, marked by an enormous spirit of sacrifice, co- operation and brotherhood. A leading role is being played by high school and university students in this Islam-

ic renaissance all over South Africa and this spirit of dynamism has revealed itself in various Islamic activities, conferences and projects. A major role is being played by the Muslim Youth Movement based in Durban.

Thus the Muslim Student Association has been established to incorporate all Muslim Students at schools, colleges and universities throughout South Africa.

Presently it publishes the Annual magazine Inqilaab.

Trained Personnel

Apart from the number of teachers and imams who graduated from universities in the Arab world and India, there is also a small number of very competent teachers trained by the local colleges and institutions.

The shortage still remains very acute especially of those who can teach Arabic language effectively. This is a problem that can be solved if more bursaries are made available to trained teachers to pursue an intensive Arabic language course and basic Hadeeth and Tafseer of Al- Quran.

FUTURE PROSPECTS

At the moment there is no possible answer in sight for the solution of the racial and political "problems" of South Africa. In effect, the issues at stake are not really problems but are made out to be such simply because the indeology of those who hold power is based on wrong beliefs and philosophies. Only a system and philosophy as humanitarian as that of Islam can answer all the most basic questions and the most profound human problems is the only alternative. There is a growing interest in what Islam has to offer.

We believe that in order to convey to the non- Muslim population both white and black the message of Islam and more specifically to the more advanced and sophisticated white society who wield power, it is essential that it be presented to white academic circles first.

Secondly that research should be done on a scientific basis to serve as the answer to many contemporary problems.

In South Africa there is an enormous scope and a very bright future and the

duty of spreading the eternal message of Islam rests heavily on the shoulders of the Muslims whose responsibility is to see that the message is conveyed.

ISLAMIC INSTITUTIONS AND LEARNED SOCIETIES

Cape

1. The Muslim Judicial Council.
2. The Muslim Assembly.
3. The Majlis- Al- Ashura Al- Islam.
4. The Islamic Council of South Africa.
5. Dar- ul- Ilm.
6. The Islamic Missionary Society.
7. Muslim Students Association of South Africa.

Transvaal

1. The Central Islamic Trust.
2. The Nurul- Islam Islamic Centre.
3. The Aligarch Association of South Africa.

Natal

1. The Orient Islamic Educational Institute.
2. The Arabic Study Circle.
3. The Islamic Propagation Centre.
4. The Muslim Youth Movement of South Africa.

ISLAMIC PRESS AND PUBLICATIONS

1. Muslim News (Fortnightly)
 This newspaper has been established in 1960 and enjoys a very wide readership, both in the country and overseas.
2. Al- Qalam (Monthly)
 This is a newspaper published by the M.Y.M.
3. The Muslim Digest- Monthly magazine.
4. Inqilaab (Annual magazine published by the Muslim Youth).
5. Al- Majlis (Monthly newspaper).

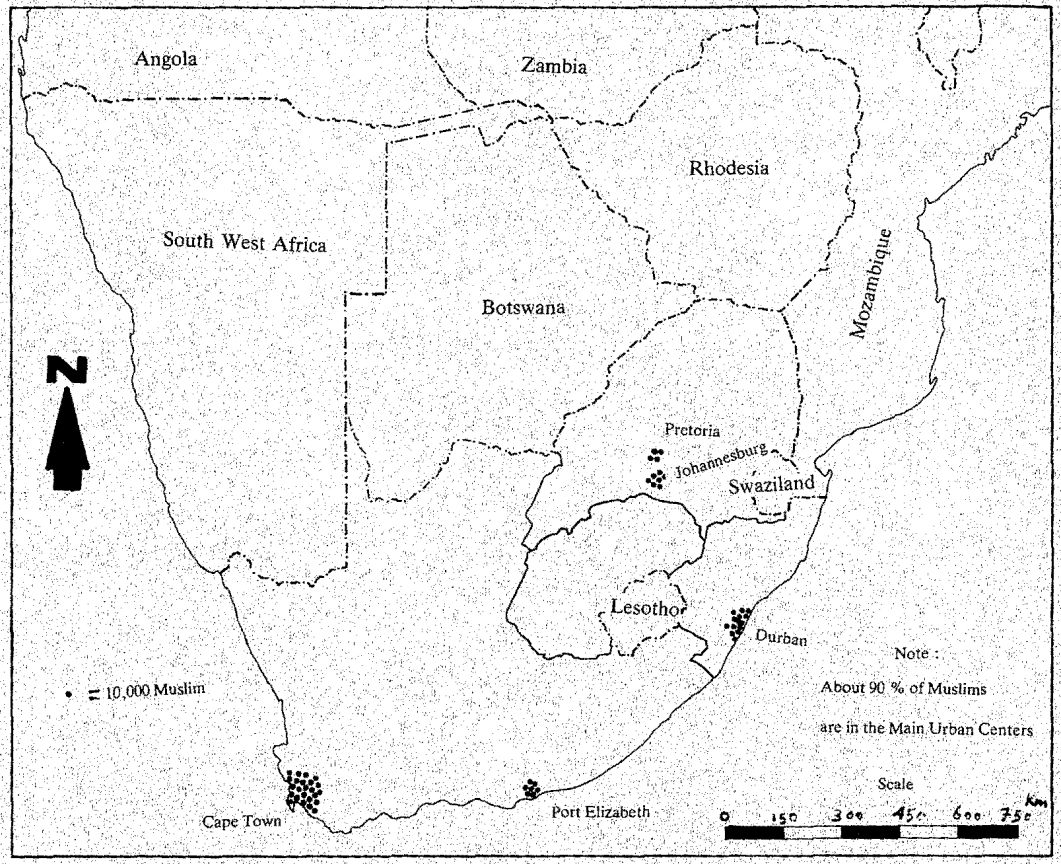
Nunerous Primary Madrassah text books have been published with the most prominent listed below.

1. The Creed of Islam by ABU BAKR FAKIER

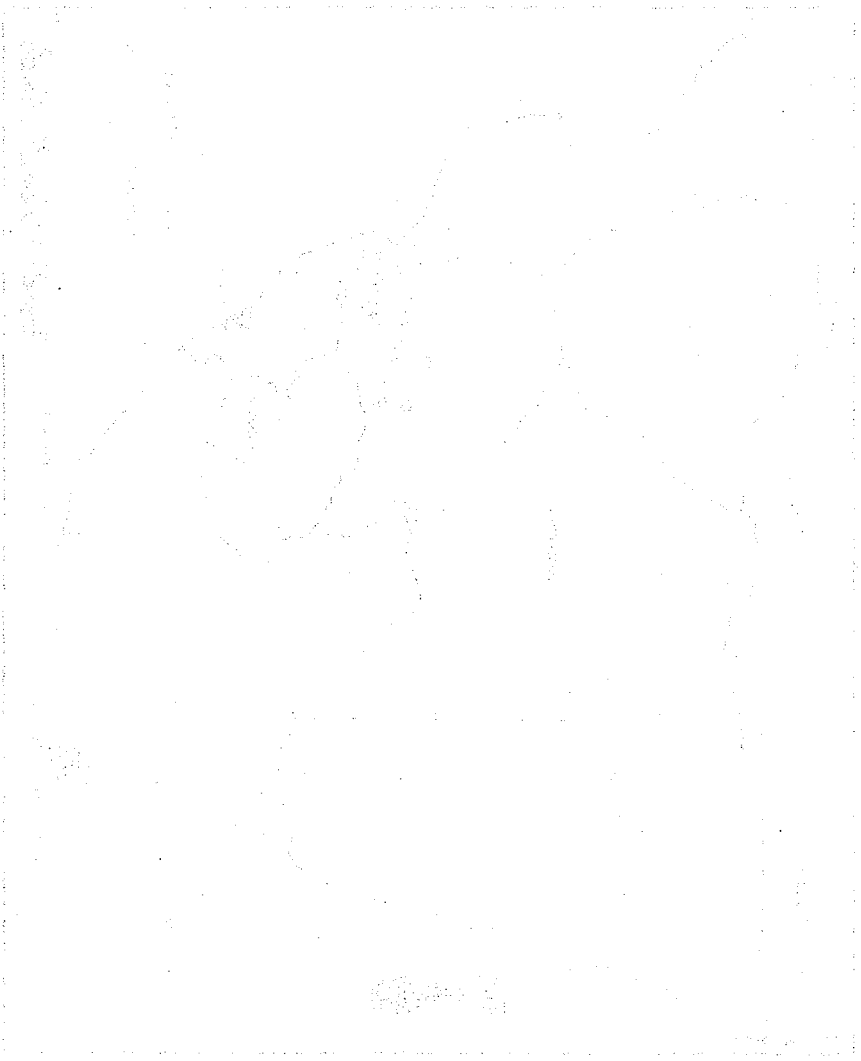
2. Read and Understand by ABU BAKR FAKIER

Many other texts on Salaat, History and Muslim ethics by ADAMPEERBHAI

Distribution of Muslims (300,000) in the Repuplic of South Africa



Provinces: 1 - Cape Province
2 - Orange free State
3 - Natal
4 - Transval



THE ACCULTURATION OF AN ARAB- MUSLIM COMMUNITY

BY

DR. MOHAMMAD M. SIRYANI

Introduction

During the last half of the 19th century, people of the Middle East began emigrating to America. The exact number of the emigrants is not known. Estimates vary widely. It is clear that more Lebanese than any other group migrated, and of these, far more Christians than Muslims tended to move. They were all attracted to this country for the same basic reasons as their European predecessors; economic opportunity and escape from political and social oppression.

There were numerous subgroups within this broad category of the Middle Eastern immigrants- ninety percent of them held religious minority status in the homeland of the Middle East. Examples were the Christian Maronites, the Christian Melkite and the Druzes of Lebanon and Syria. A few of them were refugees, such as the palestinian refugees. In recent times, some are members of the educated "brain drain" phenomenon.

The majority of the Arabic- speaking immigrants came from small towns and villages in the rural areas of agricultural societies. However, in this country, they did not work in agriculture. They initially became peddlers and small merchants. Later, they and their descendants became larger merchants, white collar workers and professionals (Aswad, 1974: 1- 17).

While the lines separating earlier Middle Eastern immigrants from American culture have become somewhat blurred with the passing generations, the more recent Arabic- speaking people have not had time to be accepted and absorbed into the more general American pattern. Much like the French Canadian and Black American, the Arabic- speaking residents usually remain as an identifiable minority group.

While they hope and try hard to fit into the general cosmopolitan atmosphere of the multi- ethnic population of large cities, their employment and financial conditions result in their accepting inexpensive housing in the older areas. Their limited knowledge of the English language is a further handicap which often standing in the way of their promotion and keeps them apart from other people. This results in the formation of distinct Arabic- speaking areas in cer-

tain large cities such as Chicago, New York, and Detroit. These areas act as ports of entry for other new immigrants of similar cultural background, who often come and settle with friends and relatives.

Study Area

The focus of this research will be on a specific Arabic- speaking community: The Arab Muslim community. Although the religious affiliation of the vast majority of people in the Arab countries is Islam, Muslims are one of the smallest religious categories in America. They are a minority even among Arab- speaking community in this country. Of approximately one and one- half million Arabic people in this country, only ten percent are Muslims (Elkholy 1966: 17). Perhaps the largest single concentration of Arab Muslims is in Dearborn, a suburb of Detroit, Michigan (Aswad 1974: 53).

Dearborn, Michigan experienced the influx of large numbers of Arab Muslims in recent decades. There are approximately 7,000 Muslims within the Detroit area. The majority of them live in the east side of Dearborn and southwest side of Detroit. This area extends from the Rouge Plant complex in the west to Clark Street in the east and from Tireman Street in the north to West Fort Street in the south (Figure 1.1)

Within this area which delimits the broad boundary of the Arab Muslim community there is a focal point referred to locally as the "South End" where the majority of the community live. The South End is located between the city limits of Detroit on the east and the River Rouge plant of ford Motor company on the west. The northern boundary of the area is John Kronk Avenue and West Fort bounds it on the south. The community is surrounded by the Ford Motor Company Levy Asphalt Company, General Patton Memorial Park and Woodmere Cemetery. The neighborhood is often not associated with the City of Dearborn. Many persons think that the area is a part of the City of Detroit (Figure 1.1).

The concentration of the Arab Muslims within this area is due to a number of factors, one of which is the prevailing occupational pattern of the Arabs. A great majority of them are employed as laborers within the automobile industry.

The South of Dearborn exhibits a specific Arab character due to the concen-

tration of the Arab people in a specific area. Many traditional customs are maintained. Along Dix Avenue, the main street, the Arabic atmosphere is marked. Numerous coffee houses are interspersed with Syrian restaurants and grocery stores which import much of their food from the old country. Advertisements are written in Arabic. Arabic is the main language spoken on the streets. The Arab Muslim community occupies not only a physical but also a cultural niche in the urban pattern.

Dearborn, therefore, offers a unique opportunity to study the development of the Arab Muslim community in the United States. It is an ideal case study for the examination of community formation and the internal organization of the community itself.

Statement of the Problem

Since the turn of the twentieth century, social scientists have become increasingly concerned with American ethnic groups and have produced a vast literature focusing on the dynamics of minority group behavior. The utilization of the Arabic- speaking communities as study groups is timely because they have received little attention in the social science literature.

This study specifically concerns the acculturation of the Arab Muslim immigrant group. More specifically, the purpose of the study is to:

> Provide further understanding of the forces, both external and internal that influence their acculturation to the new life in the united states.

Methods of Research

Several methods were used in obtaining the data on which this study is based: Field observation,interviewing, city dirctories and published materials. The main source of information was the interviews.

A controlled selection sampling procedure was chosen. The sample was drawn from each street according to the total number of the Arab Muslims living in that street. The households were indentified and listed through the use of the city Directory from which persons having Arabic surnames were chosen. A total number of 214 households were chosen for the interviews.

After all the questionnaires had been administered, the data were then coded and placed on cards. All the computations were done by the 6500 computer using the avaliable statistical programs. The primary method of statistical analysis used was Gamma which is a measure of association. A multiple correlation and regression analysis was used to examine the importance of several independent variables as predictors of the dependent variables.

REVIEW OF LITERATURE

The literature for this project deals with material related to the following categories: (1) Arab Muslim community in Dearborn; (2) Acculturation of racial and ethnic groups.

Studies in these areas have a common contribution to make to the present work. Beyond their methodological importance to the investigation at hand, their findings and conclusions directed the attention of the investigator to certain aspects and insights, giving a wider base upon which comparison and contrast of the people under this investigation could be made. Aside from their common pertinence, each area reviewed has its unique contribution to the different phases of this study.

Studies on the Arab Muslim cimmunity of Dearborn

There are four sociological studies that dealt with the Dearborn Arab Muslim community. El- Kholy was concerned with comparing the degree of religiosity of the three generations of the community with that of the Arab Muslim group in Toledo, Ohio. He emphasized the conflict between the immigrants and their descendents, the increasing weakness in the degree of religiosity, and the Arabic political attitudes of the immigrants (El- Kholy, 1966).

Wasfi's unpublished dissertation)1964) analyzed the social organization, particularly marriage patterns of the Lebanese in the community. He described the cultural background of this group and traced their marriage patterns in the Lebanese village, followed by marriage patterns in the Dearborn community. Comparing this with the American middle class marriage patterns, he emphasized the impact of American culture upon the community. Also he discussed the general aspects of culture contact, referring to two types of acculturation: forced situation and voluntary ones. Some factors of accelerating acculturation

and other factors of delaying acculturation were discussed (Wasfi, 1964: 302-339).

Aswad's study (1974) analyzed the problem of urban renewal in the area. She reviewed the colseness of primary social and economic ties in the community and their positive sentiments toward it. She discussed in detail the history of the community struggle with the city to prevent its destruction and showed that this struggle by a weaker force against a city the nature of Dearborn created division within the community as well as provided a new organization and in many ways their struggle is found to be analagous to those of colonized communities (Aswad, 1974: 53- 85).

Wigle's study (1974) analyzed kinship, religion, community and nationality amony the Arab Muslims in Dearborn. She argues for the importance of the extended family. She also notes the position of the Zaim, or influential politician and its adaptation to local politics. Islam she finds is strongly associated with the other variables and is associated with the political events in the Middle East. The identification of persons in this area as Arabs is stronger than in most of the other Arab communities (Wigle, 1974: 155- 176).

Studies of Acculturation

Since the turn of the twentieth century, social scientists have become increasingly concerned with American ethnic and racial groups. They have produced a vast literature focusing on the diynamics of minority group behavior. The first conceptual development came when anthropologists, primarily concerned with the American Indian, introduced the concept of acculturation to describe cultural changes precipitated through prolonged inter- group contact.

Sociologists, concerned largely with modern ethnic and racial groups of European, Asian, and African origin have perfected a related concept: that the assimilation.

Centered on acculturation and assimilation, anthropological and sociological studies of American ethnic minorities include both in- depth case studies and topically oriented comparative analysis. Examples of the former include treatment of Arab- Syrian, Chinese, Greek, Hindustani, Italian, Dutch, German, Black and Norwegian racial and ethnic groups (Tannous, 1943: 264- 261; Fong, 1965: 265- 273; Treudley, 1940: 44- 54; Dababhay, 1954: 138- 41; Gans,

1965; Campisi, 1968: 93- 103; Candill, 1952: 3- 102; Schnore, 1965: 126- 133; Taeuber and Taeuber, 1965; Taeuber, 1964: 42- 50; Wittke, 1967 and Jonasse 1949: 32- 41). Largely descriptive, these investigations are aimed primarily at the results of acculturation and the dynamics of the acculturation process.

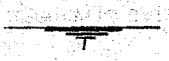
The topical analysis, which frequently involves cross group investigation includes analyses of economic, political and social behavioral patterns shared by minority groups in general (Powell, 1966: 100- 16; Schnore and Pinkerton, 1966: 49- 99; and Goldsmith and Lee, 1966: 207- 15.

This growing interest in acculturation has been concomitant with numerous recent studies of ethnic group segregation, the antitheses of acculturation (Duncan and Lieberson, 1959: 364- 74; Lieberson, 1963). Out of the myrial of case studies and comparative analysis came a growing realization that absolute assimilation was rarely, if ever, achieved; rather, most ethnic minorities continued to sustain selected cultural differences at the expense of complete cultural homogeneity.

Of particular interest to geographers, however, came recognition of both place and physical distance as factors influencing human interaction. Sometimes disruptive, these influences may curtail the acculturation process and foster ethnic group segregation (Lieberson, 1961: 52- 57). Yet accuturation's spatial dimension has been only tentatively investigated in several urban ecological studies and in several analyses of ethnic residential patterns (Jakle and Wheelor, 1969: 441- 60). Geographers, long interested in ethnic and racial minorities in the United states and Canada have Proceeded Largely incognizant of the acculturation and assimilation concepts. Some excptional works are Bjorklund (1964: 227- 41) Heinig (1965: 191- 220); Velikonja (1965: 505- 22) and Doeppers (1967: 505- 22).

The geographical Literature Largely treats ethnic and racial ghetto emergence ethnic group population distribution and distributional changes through time. Recent efforts have focussed on Chinese, Dutch, Finnish, French Canadian, German, Italian, Black and Puerto Rican minority groups (Ward, 1968: 343- 59; Sas, 1958: 185- 94; Sas, 1956: 181- 88; Davis, 1935: 382- 94; Cleef, 1952: 253- 66; Gerland, 1961: 141- 47; Jenson 1951: 1- 41; Nelson, 1955: 82- 97; Hart, 1960: 242- 66; Morrill, 1965: 339- 61; Rose 1964: 221- 38; 1969: 3- 6, 1971: 1- 17; Darden 1973, 1976a, 1976b; Novak, 1956: 182- 86 and Clark, 1960: 312- 44).

The historians have crystalized several basic approaches to American minority- group study (Gordon, 1964; Handlin, 1957). The first is that of Anglo- conformity, long used to formulate public immigration policy. It assumes even total assimilation of all ethnic mimorities by a white- Anglo Saxon Protestant majority. The second is the American melting pot which explains the continent's distinctively "American Culture" (which, indeed, varies regionally in response to varying foreign cultural inputs) as a hybrid culture, different from and perhaps greater than the sum of its individual parts. Much of the early literature proceeded from this viewpoint. Finally, the concept of cultural pluralism recognizes the persistent survival of ethnic cultures despite lengthy acculturation periods (Glazer, 1963).



OPERATIONAL DEFINITIONS

Definitional divergence surrounds many of the concepts employed in dealing with dominant- minority relations, and disagreement exists on the theoretical relationships of these concepts for one another. Among social scientists, "assimilation" "acculturation" "pluralism" and related terms have numerous definitions, implications, meanings and connotations.

The context of any study of minorities can be described only in the conventional terminology so it becomes imperative to avoid the pitfalls of conceptual inconsistency. To this end, an attempt is made to distinguish and operationalize the following concepts:

Assimilation

Assimilation is a process in which persons of diverse ethnic and racial backgrounds come to interact, free of ethnicity and race constraints, in life of the larger community. Complete assimilation would mean that no separate social structure based on race or ethnicity remained. As a concept in American sociology, assimilation has had various meanings. For some scholars it is synonymous with acculturation. According to park and Burgess "Assimilation is a process of interpenetration and fusion in which persons or groups acquire the memories, sentiments and attitudes of other persons or groups and by sharing these experiences and history are incorporated with them in a common cultural life "Bass, 1970: 10).

Complete segregation and total assimilation are opposite ends of a continuum along which may be located varying degrees of limited desegregation, substantial pluralism, hypothetical integration which values structural and cultural differences while insisting on equal life opportunities, partial assimilation, individual assimilation, and group assimilation (Sills, 1968: 438).

> "The term assimilation literally means the process of becoming "alike" ...; as used in sociology it denotes (a) the process whereby a group, generally a minority or immigrant group, is through contact absorbed into the culture of another group; (b) the result of such absorption.

> Thus (it) denotes the process in which one set of cultural traits is relinquished and a new one acquired.... the change is gradual and may take place in any degree. Full assimilation means the incorporation of new members into a society so that they are not distinguishable from former members.... (Dictionary of Social Sciences, 1964: 38)."

Gordon sees the assimilation process and the subprocesses as a matter of degree, but complete assimilation would cover variables. This conceptual scheme provides the most satisfactory criteria yet proposed for measuring assimilation and determining to what extent it is taking place (Sills, 1968: 439).

Table 1.1

The Assimilation Variables

Subprocess or condition	Stage of Assimilation
1. Change of cultural patterns to those of host society.	Cultural or behavioral assimilation (ac culturation).
2. Large-scale entrance into host society cliques, clubs and institutions on primary group level	Structural Assimilation
3. Large-scale intermarriage	Marital assimilation (Amalgamation)
4. Development of sense of peoplehood based exclusively on host society.	Identificational assimilation
5. Absence of prejudice	Attitude receptional assimilation
6. Absence of discrimination	Behavior receptional assimilation
7. Absence of value and power conflict	Civil assimilation

Source: (Gordon, 1964: 61, 70-71 and Tabls 5 and Bass, 1970: 13)

With regard to the term assimilation, there is a compelling need for a vigorous and systematic analysis of the concept which breaks it down into all the possible relevant factors or variables which could conceivably be included under its rubric. Some of the particular assimilation subprocesses or variables with their general names and special names, if any, are given in the following table (1.1).

ACCULTURATION

In the literature, acculturation refers to a group's taking on elements from the culture of another group. It has also been as a synonym for socialization, the acquistion of ways of behaving and valuing by individuals.

> "The term acculturation is widely accepted among American anthroplogists as referring to those changes set in motion by the coming together of societies with different cultural traditions. The term remains somewhat ambiguous but persistent usage gives it the meaning of cultural assimilation, or replacement of one set of cultural traits by another, as in reference to individuals in contact situations as more or less 'acculturated.'"

> "As defined by Robert Redfield, Ralph Linton and Melville Herskoits, as members of the Social Science Research Council, in 1935: 'Acculturation comprehends those phenomena which result when groups of individuals having different cultures come into continuous first- hand contact, which subsequent changes in the original cultural patterns of either or both groups' (Sills, 1968: 21)".

> "Sociologists and cultural anthropologists have described the process and results of ethnic 'meetings' under such terms as assimilation and acculturation. Sometimes these terms have been used to mean the same thing; in other usages their meanings, rather than being identical, have overlapped. Sociologists are more likely to use assimilations; anthropologists have favored acculturation and have given it a narrower but generally consistent meaning (Gordon, 1964: 61."

In this study acculturation is defined as one of the sustaining processes whereby Arab Muslim minority groups are incorporated into the dominant American culture. The term refers to the changes in the Arab Muslim individuals whose primary learning has been in the Arab Muslim culture and who take over traits from American culture. Acculturation is used here as the first stage of assimilation which is referred to by Gordon as the cultural or behavioral as-

similation. It is the first type of assimilation to occur when a minority group arrives on the scene; and this condition of acculturation may continue indefinitely without any other type of assimilation occurring.

This process of assimilation- cultural or behavioral is one of several subprocesses of assimilation... cultural, structural, marital, identificational, attitude receptional, behavioral receptional and civic. Imortant here is Gordon's distinction between cultural assimilation and structural assimilation. By cultural assimilation Gordon means the acculturation of ethnic minorities to the culture of middle class white protestants... the "core society". Gordon maintains that structural assimilation has not taken place in the U.S.; that is, minority groups in America have not entered on a large scale into cliques, clubs and institutions of the dominant white protestant society on a primay group level (Girdon, 1964: 70- 71).

Accculturation Scale

The above discussion revealed that acculturation is the first type of assimilation which occurs when a minority group arrives on the scene. This type, which is called by Gordon the cultural or behavioral assimilation, includes changes of cultural patterns to those of the host society.

It is a new behavior in which material culture, every day language and secular roles acquired (Marden and Meyer, 1968: 35, 437). For purposes of this study, this aspect of the process was chosen as a means of measuring the degree of the Arab Muslim's assimilation into the American culture. Seven questions in the interview schedule were designed to measure the behavior of the Arab Muslim immigrants and how it conforms with or diverges from the American social behavior. The items dealt with habits, social relationship and symbolic behavior. More specifically they dealt with language, food habits, social visits, social functions at coffee houses, dating, drinking and dancing. The question and the respondents' answers are shown in Tasble 1.2.

The ways of life of the community members reveal that these members manifest four types of cultural patterns:

1. Arab Muslim standard patterns. These are regarded as survivals or unacculturated elements.
2. Arab Muslim modified and American modified patterns. These are considered as acculturated patterns.

3. American standard patterns. These are referred to as assimilated elements.

In order to define the mechanism of acculturation, the cultural patterns of the community were analyzed on the basis of the above three types.

Table 1.2

The Components of the Acculturation Scale

Item	Always	Often	Seldom	Never	Total
Arabic language spoken at home	64	10	25	1	100
Eating Arabic food	66	27	6	1	100
Social Visits to neighbors	50	22	22	6	100
Going to coffeehouses	40	24	21	15	100
Dating	29	23	19	29	100
Drinking	8	24	30	38	100
Dancing	19	23	27	31	100

Table 1.2 shows that the first four items: Arabic food, Arabic language, repeated social visits and coffeehouses social functions are regarded as old culture "standard" forms. The last three items: dating, drinking and dancing are regarded as American "standard" elements because they are not found in the original culture the way they are in the adopted culture. Drinking and dating are prohibited by the Islamic religion and if they are practiced in the old culture, they are not social norms and the majority of the people consider drinkers and daters as deviaters from the norms of the majority. American dancing is quite different from that of the original culture and could be considered in its way among the American people as a quite new phenomenon for the Arab Muslim immigrants.

By measuring the divergence from the orginal culture on the first four items and the conformity with the American culture on the last three items, we can see where those people stand on the acculturation dscale. The scale assumes its

beginning with the original culture as lowest point then it moves up to the adopted culture as the highest point, leaving the space in between for the modified culture. The responses to the first four items were scaled as zero for "always" response, one for "often" response, two for "seldom" and three for "never" response. The last three items are in the opposite direction. They were scaled as three for "always" response, two for "often" response, one for "seldom" and zero for "never".

The assumption is that the more the person diverges from his original culture, and the more he conforms with the adopted culture, the more he is considered to be highly acculturated.

The first four items showed a low level on the acculturation scale (Table 1.2). Sixty- four, 66, 50, 40 percent of the respondents use Arabic language, eat Arabic food, perform social visits to neighbors and go to coffee houses respectively. These high figures show the dominance of the old culture forms in the community. The following reasons might have effected these high figures.

1. Forty- two percent of the community are recent immigrants who came during the last seven years.
2. Ghetto life of the community, where there are high percentages of relatives and friends.
3. The existence of native food and native ways of cooking.

The last three items: drinking, dating and dancing show a relatively balanced distribution between the two ends of the scale. The low percentages of alcohol drinkers might reflect some bias in the responses.

The first question now is whether these seven items have anything in common, that is, whether they seem to measure a single variable; this variable we infer from the content to be the intensity of cultural assimilation into American society. The scores of the above seven items were added and dichotomized by the mean to differentiate between high and low acculturation among the respondents. Forty- eight percent of the respondents have low scores on the acculturation scale and 52 percent showed high scores on that scale[1].

(1) During the field work some of the interviews were held in coffe- houses where there were some people other than the interviewer and the interviewee. It was thought this might lead to false answers to some of the items in the questionnaire, especially those items that deal with dating, drinking and dancing. It was felt that although some of the respondents do drink alcohol, they

Hypotheses

On the basis of the foregoing conceptualization, the following hypotheses are derived.

H : 1 There are spatial, generational and national subgroup differences among the Arab Muslim population in terms of their level of acculturation.

H : 2 Single immigrants and immigrants who did not bring their families are less acculturated than those who live with their families.

H : 3 Immigrants with urban background have higher level on the acculturation scale than immigrants with rural background.

H : 4 Ethnic social bonds are inversely related to accuituration level.

H : 5 Perceived discrimination from the host society is inversely related to acculturation level.

H : 6 Level of acculturation is directly related to time of arrival in America.

H : 7 Level of acculturation is directly related to residential patterning: dispersed population are higher in their level of acculturation than concentrated population.

H : 8 Level of acculturation is directly related to interurban mobility.

Socio- economic Characteristics and Acculturation

The acculturation scale was correlated with some of the socio- economic variables. The results are shown in Table 1.3. Among the national subgroups, the Lebanese are higher than the palestinians and the Yemenis. This might be a result of the early immigration of the Lebanese and the relatively recent immigration of the Yemenis, who showed the lowest on the acculturation scale. First

= **are not ready to confess that they practice this habit.**

to avoid this bias which might affect the scale of acculturation we selected five items which show some other behavioral aspects of the community. These items are (1) eating with hand instead of spoon; (2) sitting on carpet rather than chairs; (3) inviting neighbors and relatives when a guest comes; (4) style of marriage ceremony whether American or Arabic; (5) do children eat with guests)

observation was concentrated on these items. Recording of these observations were made after the interview. Thirty- eight cases were recorded. An acculturation scale was devised from these items. The results showed that 50 percent have a high level on the acculturation scale. the other 50 percent have a low level on that scale. A test of signifivance between this sample and the above sample showed no significant difference between the two. This was done as a check for the validity of the scale.

generation immigrants are lower than second generation members who were born and educated in this country.

Single immigrants, as shown in Table 1.3 are less acculturated than married people. This might reflect their recent immigration to the United States. Divorced members are the highest on the acculturation scale. It is found that all divorced heads are from the second generation members. Married heads of household who have wives and families here show higher level of acculturation than those whose wives are in the homeland. Part of the answer to this is that most of the immigrants who live without their families are not planning to stay forever in this country, so they do not care about adapting their life style to the American culture.

Spouse stock showed a significant relationship. Heads of household whose spouses are Arab descent are less acculturated than those whose spouses are either American or Arab- American born in this country.

Rural- urban background showed a weak association with the acculturation scale. The direction is opposite to what we hypothesized. This might be due to the fact that there are no sharp differences between rural and urban population of the country of origin.

When correlating the date of migration of the respondents with the acclturation scale the results showed the longer the duration of residence in the United States the higher the level of acculturation. The relationship is quite strong and in the same direction as we hypothesized.

Income showed a direct relationship with the level of acculturation. The data 1.3 confirm the hypothesis that the higher the income, the higher the level of acculturation.

Contrary to that of income, education showed a very weak association and no direction with the level of acculturation. The lowest and the highest levles of education are quite the same on the acculturation scale. Six- graders are higher in the level of acculturation than 7- 12- graders, and those who have college are higher than those who have Master's on the scale also. The higher level of acculturation among the lower level of education might be explained by their early immigration to this country which gave them the chance to live longer in the American society. On the contrary, most of those who have degrees beyond Bachelor are recent immigrants, thus they show lower level than those who are college graduates.

Table 1.3

Acculturation by Socio- economic Variables

Variable	& Low	Acculturation & High	Total
Acculturation scale	48	52	100 (219)
National Groups			
1. Lebanese	42	58	100 (74)
2. Palestinians	46	54	100 (54)
3. Yemenis	65	35	100 (52)
		Gamma = .100	
Generation			
1. First generation	51	49	100 (183)
2. Second generation	40	60	100 (31)
		Gamma = . 27	
Marital Status			
1. Single	68	32	100 (41)
2. Divorced	36	64	100 (14)
3. Married	44	56	100 (150)
a. Spouse here	36	64	100 (43)
b. Spouse in homeland	56	44	100 (43)
		Gamma = 41, - .53	
Spouse Stock			
1. Arab	46	54	100 (134)
2. Arab- American + American	39	61	100 (33)
		Gamma = 28	
Urban- Rural Background			
1. Came from Village	48	52	100 (141)
2. Came from city	52	48	100 (42)
		Gamma =-. 08	
Time of Arrival in America			
1. Before World War II	38	62	100 (90)
2. 1948 - 1959	40	60	100 (47)
3. 1960 - 1969	43	57	100 (30)
4. 1970 » 1977	58	42	100 (16)
		Gamma = . 27	

Table 1.3 (cont.)

Acculturation by Socio- economic Variables

Variable	Acculturation & Low	Acculturation & High	Total
Income (1,000)			
Less than 10	56	44	100 (41)
10 to 14.8	50	50	100 (64)
15 to 19.9	46	54	100 (50)
20 and over	42	58	100 (59)
	Gamma = 14		
Education (Years)			
0 - 6	46	51	100 (70)
7 - 12	52	48	100 (88)
College	38	62	100 (37)
College +	47	53	100 (19)
	Gamma = 07		
Occupation			
High	40	60	100 (53)
Low	53	47	100 (97)
	Gamma =- 26		
Relatives as close neighbors			
The majority of neighbors are relatives	53	47	100 (170)
Few of neighbors are relatives	40	60	100 (44)
	Gamma = 09		

Occupation figures confirm the hypothesized relationship which states that the higher the level of occupation, the higher the level of acculturation.

"Relatives who live as close neighbors" was taken as an indicator of ethnic bonds. If the majority of neighbors are either relatives or from the same area, their reaction to the acculturation process will be less than those who live in an ethnically mixed area. Therefore, the higher the number of relatives in the neighborhood, the lower the level of acculturation of the people of that neigh-

borhood. Data in Table 1.3 support this argument. Forty- seven percent of those who live among their relatives showed high level of acculturation while 60 percent of those who responded that there are few relatives in their neighborhood have high level of acculturation, but relationship is very weak between the two variables (Gamma = .09).

Discrimination and Acculturation

Among the factors that restrain the process of acculturation are the prejudice toward and discrimination against ethnic and racial groups by the host society. Gordon mentioned the absence of the above two items together with the absence of value and power conflict as the last constraints for complete assimilation (Gordon, 1964; 61- 71).

Early immigrants were faced with hostility and antagonism. They were obliged to change their names and religion to be permitted in as immigrants (Elkholy, 1965: 58).

> "The pioneers of the community during the twenties and thirties had suffered religious discrimination from some Americans who misunderstood the principles of Islam. This helped in the concentration of the community members and in developing the self-inferiority feeling. Their concentration and such inferior feelings hindered the possible increase of interpersonal contacts between the two culture groups (Wasfi, 1964: 318)".

Wasfi reported another aspect of discrimination against the members of the community. They were discriminated against in employment.

> "While Ford plants have accepted any laborer, in spite of his faith, color, or origin, some other companies refused to employ the Arab Muslim pioneers. This discrimination was another factor that persuaded the emigrants to concentrate in a ghetto- like community in the shadow of the Ford Rouge Plant. This concentration, in turn, hampered the process of acculturation (Wasfi: ibid)."

Wasfi in his study in 1964, describes the interpersonal relationships between the members of the Arab Muslim community and the host society as

friendly assuming, no discrimination against the members of the Arab Muslim community.

> "[The] hostility has completely vanished with the increased number of literate and educated descendents in the community. Moreover the decline of self- inferiority feelings has played a partial role in ending this hostility..... None of the very few members who have brown complexions reported racial discrimination. It seems that the absence of any Indian or Negroid physical features among the brown- complexioned members may explain the lack of such discrimination.
> Thus we can say that the culture contact has been a friendly one. (Wasfi, 1964: 304)."

In an effort to assess the situation as it is now, two questions were developed in the interview schedule to examine the presence or absence of ethnic discrimination by the host society. Knowing that the members of the community live in an area dominated by Arab residents or in an ethnically mixed area, the question was designed as follows:

> "Do you feel that you would be discriminated against in other areas?Why would this be? Respondents answers are: Yes strongly, 45 percent; yes medium, 12 percent; yes weakly, 10 percent, and no, 33 percent. In other words, 67 percent of the respondents feel that the host society practices discrimination against the community in one way or another.

When correlating discrimination with acculturation (Table 1.4) the results prove that 64 percent of those who have high level of acculturation face a kind of discrimination in one way or another.

To eliminate the effect of self- inferiority which usually accompanies the members of first generation immigrants, who feel that they might not be equal to their counterparts from the host culture, the respondents were dichotomized into first and second generation. The results are shown in Table 1.4.

Forty- five percent of the second generation immigrants, who were born in the host society, educated as their American peers and adopted the American social life feel that they face discrimination from the host society. This proves that discrimination is not because of a lack of the adopted norms of the society, but as a result of racial and ethnic prejudice.

Table 1.4

Discrimination by Generation and Acculturation

Variable	Acculturation & Yes	Acculturation & No	Total
Level of acculturation			
1. high	64	36	100 (111)
2. low	70	30	100 (103)
		Gamma = . 09	
Generation			
1. lst generation	70	30	100 (183)
2. 2nd generation	45	55	100 (31)
		Gamma = . 12	

We were not able to quantify the reasons which are reported by the respondents to the question: "Why would this (discrimination) be?" but we will mention some of the reasons mentioned by five of the respondents.

1. "Because of religion and heritage".
2. "Ethnic background, physical appearance, class background."
3. "I am an Arab. We are called Syrian niggers."
4. "Skin, religion and culture."
5. "General attitude of non- Arabs toward Arabs throughout United States. Americans are either ignorant of what Arabs are, or are propagandized by distorted media representations of Arabs and their culture, general intolerance and prejudice toward Islam."

The above paragraphs shed some light on some ethnic and religious hostility by the members of the host culture which restrain and delay the acculturation process.

Residential Distribution and Acculturation

Our aim is to examine to what degree the factors of spatial patterning are re-

lated to the processes of acculturation. Previous literature (Jakle and Wheeler, 1968: 441- 459) shows that residential patterning is directly related to the acculturation mechanism. Where a high acculturation rate exists, the ethnin population tends toward greater dispersal in residential patterns; conversely, where the acculturation rate is low, increasing residential concentration is the rule, because large influxes of ethnic immigrants intensify the degree of ethnocentricity, reduce social interaction between the immigrants and host populations and retard the rates of acculturation.

We discussed the evolving patterns of residential distribution and we came to the conclusion that within the three subareas: South End, East Dearborn and Southwest Detroit there are two distinctive patterns of residential distribution: the ghetto or the core area which experienced a growing spatial concentration and the periphery or the area which surrounds the core which showed a dispersed residential pattern. The core area coincides with the South End while the periphery contains East Dearborn and Southwest Detroit.

The hypothesis which we are trying to test is that the level of acculturation in the core area (South End) is lower than the level of acculturation in the surrounding areas (East Dearborn and Southwest Detroit).

The acculturation scale was correlated with the three subareas. The results are shown in Table 1.5. Fifty- two percent of the respondents in the South End have a high level of acculturation, while 61 and 47 percent of the other two areas have high levels of acculturation. The results show that the core area has a higher level of acculturation than the middle- class area of East Dearborn. Southwest Detroit is the highest on the scale of acculturation although it was recently inhabited by very recent Arab Muslim immigrants. The results are in the opposite direction to what we have hyothesized; the relationship is very weak between the two variables.

What seems to be puzzling is clarified when we controlled for the date of entry to the United States. Recalling that most of the old immigrants live in the South End we might expect a higher level of acculturation among them. So we correlated the respondents who came in the last seven years- since 1970- by the three subareas which are inhabited by Arab Muslims. The reason for taking only those who migrated in the last seven years is that before that time, the number of Arab Muslims who lived in Southwest Detroit and in East Dearborn was small. The results show that those who lived in the South End for the last

seven years are lower in their level of acculturation than those who lived in ether Detroit or East Dearborn. The relationship is strong and significant at the .01 level. The reason is that the South End is a ghetto area inhabited by a homogeneous group with identical ethninc background and distinct social customs. The traditional customs are preserved and maintained to a great extent by the members of the community. One cannot observe the Arabic atmosphere on Dix Street: here are many coffee houses whose patrons speak Arabic and drink the same tea and Turkish coffee that they drink in the old country and play the same games, at home the same Arabic food is served. The Syrian groceries import food from all Arab countries. The Syrian bakeries and pastry shops provide familiar food, too.

Table 1.5

Aculturation by Place of Residence and Mobility Plans

Variable	Acculturation & low	Acculturation & high	Total
a) Place of residence			
1. South End	48	52	100 (141)
2. Detroit	39	61	100 (28)
3. East Dearborn	53	47	100 (45)
		Gamma = . 04	
b) Place of residence for those who came between 1970 - 1977.			
1. South End	60	40	100 (64)
2. Detroit	48	52	100 (11)
3. East Dearborn	39	61	100 (15)
		Gamma = . 26	
Plan to move			
Yes	35	65	100 (69)
No	59	41	100 (145)
		Gamma = . 19	

The population outside the core in East Dearborn, Southwest Detroit and other parts of Detroit Metropolitan Area such as Dearborn Heights are randomly distributed throughout the city. The gathering of three or four families in one section does not indicate more than chance. The residential distribution exposes the members of the community to the American culture much more than the residential pattern in the core area. This might justify the higher rate of acculturation among these people.

Interurban Mobility and Acculturation

In the previous chapter we failed to explain mobility plans and mobility aspirations by the preference model. The results showed that dissatisfaction with the area of residence is not followed by moving out of it. We presumed that people are under certain constraints such as language barriers, availability of job and lack of contact with American culture, which lead to a kind to self-inferiority and prohibit them from moving out of the community.

In this chapter we tried to see if the level of acculturation has anything to do with plans to move out of the area, assuming that a high level of acculturation breaks the barriers between the community and the host society and encourages members of the community to leave their colony and live wherever they want to live depending upon their rank in the class system of the society.

Hypothesizing that the level of acculturation is directly related to mobility, we correlated moving plans with level of acculturation. The results are shown in Table 1.5. Sixty- five percent of those who planned to move have a high level of acculturation, while only 41 percent of those who plan to stay have the same level of acculturation. The relationship is moderate but significant at. 05 level.

The above analysis gave us a clue to re- evaluate and view inter- urban mobility in terms of constraints which the people of the commumity are faced with. As soon as these constraints diminsh the people have the full choice for intra and inter- urban mobility. In an attempt to test the constraint model a mutiple correla-tion and regression analysis Was performed, . The variables wewe mobility plans as the dependent variable, acculturation, discrimination and number children between 14 - 18 years of age in the household as the independent variables.

The assumption is that acculturation is a good indicator for perceiving equality with the host society, lack of self- inferiority, the desirability and acceptance of the norms and behaviors of the host society, On the other hand, discrimination is a measure of the degree of non- acceptance by the host society. Number of children is taken as an accelerating factor for moving out of the community. It brings about pressure for seeking other areas outside the colony.

Coefficients of simple correlation showed that moving plans, the dependent variable, is well associated with the three independent variables. Simple correlation r = .45, .53, .48 for discrimination, acculturation and number of children 14- 15 in the family respectively. Discrimination showed an inverse relationship with moving plans, while the other two variables have direct relationship.

The three independent variables yielded a coefficient of multiple correlation (R) of .67 and statistically account for almost 45 percent of the total variation in the dependent variable. Thirty- one percent of the total variation is attributed to acculturation, while discrimination and number of children added only 15 percent with a level of significance .04, .01 and .02 respectively.

Comparing these results with the preference model which explained only eight percent of moving plans, we conclude that spatial mobility behavior of minority groups is best explained by the constraint model rather than the preference model which assumes freedom of movement.

Factor Affecting Acculturation

In the preceding discussion we have seen factors which accelerate acculturation and others which work in the reverse direction, that is, restraining the process of acculturation. Ten independent variables were correlated with the acculturation index in a stepwise multiple correlation to see how much acculturation can be predicted or explained by these variables. The variables are income, education, occupation, spouse stock, years lived in the United States, relatives as close neighbors, attachment to old land[1], discrimination, degree of satisfaction with the community and plans of moving out of the community.

The results showed that together all the variables yieded a coefficient of mul-

(1) This variable is an index of two variables dealing with visits to the homeland and money sent to the homeland for business purposes.

tiple (R) of .831 and statistically account for 69 percent of the total variation in the acculturation variable.

Only six variables were retained in the analysis. The other four variables, education, spouse stock, occupation, and satisfaction with the area of residence were deleted by the computer showing no association and no prediction power to the level of acculturation.

Out of the six variables retained in the analysis, date of immigration to the United States explained 45 percent of the total variation in the dependent variable. The other five variables, which are income, discrimination, plans of moving out of the area, relatives as close neighbors and attachment to the old land explained only 24 percent of the total variation in the level of acculturation (4, 4, 7, 7, and 2 percent respectively).

The above analysis revealed that acculturation can be best explained by the duration of residence in the United States rather than any other variable. In fact, everything being equal, the longer the duration of residence in the United States, the more the individual ascends on the economic ladder and the more his social norms and behavior come close to the norms of the host society.

Summary

The above analysis revealed that there are spatial, generational and national subgroup differences among the Arab- Muslim population in terms of their acculturation. The level of acculturation in the core area (South End) is found to be lower than the level of acculturation in the surrounding areas (East Dearborn and southwest Detroit) when controlling for the date of arrival in the United State.

Among the national subgroups, the Lebanese are higher on the scale of acculturation than the Palestinians and the Yemenis. First generation immigrants are lower than second generation members. Single immigrants are less acculturated than married people. Among the married people, those who have wives and families here show a higher level of acculturation than those whose wives are in the homeland. The analysis confirmed that the higher the number of relatives in the neighborhood, the lower the level of acculturation of the people of that neighborhood. Perceived discrimination from the host society is found to be inversely related to the level of acculturation. On the other hand, time of ar-

rival in the United States and interurban mobility are found to be directly related to the level of acculturation. Dispersed population are higher in their level of acculturation than concentrated population.

All the hypotheses are supported by the analysis except H: 3 which dealt with the rural- urban background of the immigrants. The analysis showed an opposite direction to what we have hypothesized, indicating that there are no sharp differences between rural and urban population in terms of their level of acculturation.

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MUSLIMS IN CANADA

A CENTURY OF SETTLEMENT

1871 - 1976

BY

DAOOD HASSAN HAMDANI

ABSTRACT

This paper embodies the first study of the Muslim settlement in Canada. It traces the introduction of Islam back to 1871 and provides estimates of Muslim population in Canada in recent years up to 1976. The pattern of their regional distribution in Canada is analyzed and three major shifts are identified. The role of such factors as the Canadian immigration policy, cultural diversity and bilingualism and economic and employment opportunities in determining the shifts in the geographical pattern of the settlement of Muslims is analyzed. Finally, estimates of Muslim labour force and their occupations are presented for the years, 1971 and 1976.

PREFACE

In the ancient empires, statistics on population was gathered in order to collect taxes and raise armies for the emperors. Today, statiatics is needed and compiled to serve the society better and to plan for its needs efficiently. This work is a first step in this direction. It is a journey into unknown and unexplored territories. There are no footsteps to lead and no beacons to guide.

My interest in this project began in the spring of 1977 when I was invited to address a joint session of the Council of Muslim Communities of Canada and the Canadian Council of Christians and Jews in Toronto on the subject of an islamic economic order. That speech touched upon, among other things, the economic status of the Muslims in Canada. The reception it received was much beyond expectations. It was printed by journals in North America, Europe and the Middle East-among them the Journal of the Rabitat al Alam al-Islami. The wide acceptance and circulation of this speech brought home to me the extreme paucity of and the dire need for basic factual information about the Canadian Muslims.

In August 1977, I received an invitation to speak at the Institute for Christian life in Canada, under the auspices of the Catholics for Social Change and the Toronto School of Theology Continuing Education, on Canadian Muslims. As the invited speakers included some of the very eminent personalities, it meant a massive amount of work for me. I frantically searched for material on the social and cultural aspects of Muslim life in Canada in libraries, friends' personal collections and everywhere else I could think of but all in vain. This left no doubt in my mind that this painful gap had to be bridged and the Muslim organizations in Canada had to be jolted into this reality.

The Council of Muslim Communities of Canada grasped the need and kindly undertook to finance this work. This study deals with the basic demographic facts about the Canadian Muslims. It is hoped that it will become first of a series of studies on the demographic, social, cultural and economic aspects.

This paper is the first and not the last word on the subject. If it is treated as such it will have achieved a great deal. Any work of this nature is subject to sta-

tistical error; even the census does not ensure coplete accuracy. It can be said with confidence that the statistics presented here is well within the acceptable margins of error.

In the course of this study, I was fortunate to have had the benefit of the advice of some of the leading demographers and experts on the religious, cultural and ethnic aspects of the population. I was also given access to some very useful unpulished statistics. These people will recognize their contributions in the following pages. I would, particularly, like to mention John Kralt of Statistics Canada who bore with me patiently and from whom I learned a great deal about this subject. Aly Hamdani rendered help at all stages of the preparation of this work. He was particularly sharp in catching errors, and if any still remains, that is because I did not show him those pages. Finally, my greatest debt - one that is eternal - is to Aly Hamdani who can rarely find time to read my writings but continues to inspire them.

I. INTRODUCTION

In Expo '67 in Montreal, Canada named its pavillion 'Katimavik', an Inuit word which means meeting place. Few other words can so aptly describe the settlement of this country and character of its population and culture nor, indeed, can any other country have a better claim to that name for Canada stands out among countries which encourage and promote multiculturalism. Here cultures meet not to turn into a melting pot but to enrich each other and create a mosaic in which each ethnic group can recognize its contribution.

The population of Canada has been shaped by immigration to a degree far of proportion in comparison with any other industrialized country in recent history. The number of new Canadians, as the post-Second World War immigrants are known, however large, does not fully convey the immensity and pervasiveness of their influence which is manifest in almost every walk of life. In this country, immigrants do not merely add to the number of inhabitants, populate vacant territories, till new lands and run factories, but they have also brought with them their customs and traditions, names and nomenclature, arts and cultures, outlooks on life and of life and their beliefs and faiths. Their presence has very profoundly affected the Canadian social fabric, cultural heritage and even the spectrum of religious life. Some of these influences have been inevitable if for no other reason than the sheer force of the number of people who brought them and others irresistable by virtue of their aesthetic appeal and cultural value.

While immigration affected the demographic, social and cultural aspects of life in Canada, it also had an extremely important impact on the religious composition of the population. Natural increases, through births and deaths, and conversions from one faith to another do contribute to differences in the relative rates of growth of various religious denominations but, in a country with a small base of population, immigration has a more pronounced effect.

In the past two decades or so, the religious composition of the Canadian population underwent some significant changes. For example, among the adherents of Anglican, United and the Roman Catholic Churches, the proportion of each of the first two in the total population declined and that of the Roman Ca-

tholics increased. This shift need not necessarily reflect changing appeal of one or the other denominations; to an overwheling degree, it is the arithmatic of immigration. During the same period, the number of persons, claiming allegiance to the group labelled "others" by Statistics Canada (Government of Canada's statistics gathering agency) grew at a faster pace than that of the principal (in terms of following) denominations. Hidden in this category lie the Muslims, the followers of Islam, the last of the three great monotheistic religions.

The Muslim settlement in this country is as old as the Canadian Confederation itself (the 1871 census recorded their presence) yet little is mentioned or known about their population and even much less about their contribution to the Canadian society. Indeed, such has been the state of knowledge that when the year 1971 dawned, it did not occur to any Muslim association or organization that it marked the first century of their settlement in Canada. There is, up to now, a sense of disbelief and amazement at the fact that our ancestors may well have been witnesses to the great event of the formation of the Canadian Confederation in 1871.

It is hoped that this work will serve as a first step towarc bringing about an awareness, among Muslims, of their history, and bringing ome to the fellow Canadians, in general, that Muslims are an integral part of the Canadian society and constitute a social and cultural element of significance by virtue of their numbers as well as their rich and refined cultural heritage whose achievements have adorned the pages of history.

Over the past 105 years, from 1871 to 1976, the Muslim community has grown from 13 persons to 69,300. In 1871, all of them lived in Ontario. Now they are spread through the length and breadth of the countr/, from Newfoundland in the East to British Columbia in the West and Yukon and Northwest Territories in the North. They come from diverse national backgrouds, covering more than four dozen countries in all the continents.

In this century, up to the Second World War, the Muslims were concentrated in the Western provinces, reflecting their agricultural backgrounds, opening up of Alberta and Saskatchewan in the beginning of the 20 th century, the wheat boom and, above all, the Canadian immigration policy. After the Second World War, the immigration policy began to change and the sources of Muslim migration to Canada shifted. Increases in the number of Muslims coming from French-speaking countries and shift in the occupational characteristics brought

about concentration in Quebec. Cultural pluralism and bilingualism, which offered the new immigrants the enviable choice of regions on linguistic grounds, played a very significant role.

Inauguration of Islamic studies at the Mc Gill University in Montreal in 1952 may also have attracted many Muslim scholars and students to Quebec. Since the second half of the 1960's, the center has shifted to Ontario which now accounts for slightly less then 60 per cent of the Muslim population in Canada. The main reason for this shift is likely to have been an economic one. The sources of immigration also shifted back to the English-speaking areas. The eruption of 'quiet revolution' in Quebec into agitation and violence which, people thought, marked the end of Saint Exupert's dream of Quebec as "Terre des hommes", did not result in any noticeable exodus of Muslims from that province because most of them who settled there in the first place did so on grounds of cultural and linguistic affinity.

The Muslims are useful members of the society. They have made their imprint on the Canadian cultural heritage. The first mosque (or masjid, as Muslims prefer to call it) in Canada was built in 1938 within half a dozen years of the erection of the first North American masjid in Cedar Rapids, Iowa in the United States. The Ottawa masjid, one of the most recently completed ones is among the official landmarks of the Capital region. Islamic studies, along with Arabic, Persian and, Urdu, are included in the courses of study at two of the oldest and largest universities in the country and there are several thousand Canadians who can speak Arabic, one of the emerging international languages and one which is already being used by international organizations.

Their contribution to the Canadian economy is significant. In 1976, they contributed 500 million dollars to the national economy. More important, they supplied their services when and where they were needed. They tilled the vast expanse of agricultural land in the West when Alberta and Saskatchewan were opening up in the beginning of this century. As the country embarked on industrialization, skilled and professional Muslims arrived to work in factories and offices and to do research to increase productivity. When the baby boom of the post- Second World War period rolled into grade schools and then graduate schools, and demand for teachers soared, Muslims filled this need. They taught not only in the main centres of educational institutions like Montreal, Toronto and Vancouver but also in the schools of the far-flunged areas of the country. They located themselves, and flit about when need arose, wherever their servi-

ces were in demand and wherever they could be productive citizens, contributing to the economic well-being and prosperity of their country.

This is a demograpgic study but one must not lose sight of the fact that behind these numbers, there are human beings in soul and flesh. The Muslims, like fellow Canadians, partake of the bounty of this country and bask in the glory of its people. But as equal partners in the emergence of this land and the growth of this nation, they have also shared in its trials and tribulations The following pages, though mainly statistical in nature, sufficiently bring out the fact that the Muslims are loyal, productive and concerned citizens who have not shirked work or shunnd responsibility whether it was cultivating the virgin lands of the prairies or daring the white-outs of the Territories or it was fighting for Canada to defend and uphold the principles of justice, liberty and human dignity. They were part of this nation at the dawn of national history and they have been tryst with its destiny. They know as well as any other citizen of this country that our bequest to posterity must be richer than heritage from our forefathers.

II. ALTERNATIVE APPROACHES

The estimation of the Muslim population in Canada can be approached in three ways. The first and the most obvious possibity is offered by the census of Canada. The most recent census was undertaken in 1971 and it, like the previous ones, contained a question on religious affiliation. However, in view of the importance of recency of data for the purpose of planning facilities for the community, the 1971 data have little relevance today and will be of much less use in the future. The relevance of the 1971 statistics is further impaired by the fact that the Muslim population underwent a very rapid increase in the first half of the 1970's, the years immediately following the census. It is, therefore, obvious that although the 1971 Muslim population. if obtainable from the census, would be the most accurate statistics available, it has to be supplemented and updated by estimates for the later years. As the years following the last census witnessed a very substantial growth in the Muslim community in this country, it is essential to develop an estimation procedure that can be employed, now and in future, to bring the census count up-to- date. Hence estimation, as distinct from census or survey, has a very important and indispensable role in any statistical study of the Muslim population.

In this connection, it should be remarked that although the census of Canada collects information on the religious affiliaton of the population. the coding manuals, which determine what sort of statstics can be retrieved and tabulated from the census questionnaires, do not identify Islam. Therefore, it is not possible to obtain any information about Muslims from the 1971 census. This situation has been partly due to the fact that Statistics Canada (Government of Canada's statistics gathering agency) was not aware of the size and the growth of the Muslim community nor did the Muslim organizations approach government officials to impress upon them the need for this Statistics. Statistics Canada has, kindly, given us assurance that adequate provision will be made in the 1981 census to identify Muslims separately.

The second option is to undertake 'census' of Muslims. Some organizations have been thinking along these lines. In a loose sense, this approach has already been implemented and a number of associations launch vigorous campaigns at large gatherings, especially on the occasion of Eid, to compile directories and

lists of Muslims living in their respective jurisdictions. This option poses some formidable and insurmountable difficulties. Such an approach is feasible for small cities but impractical for large ones like Montreal, Toronto and Vancouver.

The third alternative marks a departure from reliance on census to direct estimation, making use of various pieces of information, and relationships between religious affiliation and socio-cultural-ethnic charateristics. A strong relationship has been observed between religious affiliation and ethnicity in Canada. In some cases, the strength of this relationship is so obvious that one does not need any solid statistics to substantiate it. For example, nearly three-fourths of the total Canadian population is of british and French origins and this is reflected in the preponderance of the adherents of the Roman Catholic, United and Anglican Churches. This type of association is particularly strong with respect to the denominations which do not have a very large following in this country. A few examples will illustrate this point. According to the 1971 census, 86 per cent of all the Hutterites in Canada are of German origin; 82 per cent of the Ukranian Catholics are Ukranians; 84 per cent of the Confucians and Buddhists come from Asia and 93 per cent of the followers of the Christian Reformed Church are of Dutch ethnic origin. It is, therefore. not unreasonable to infer that a large majority of the immigrants coming from Muslim countries would be the follower of Islam. This relationship between religion and ethnicity is used by Statistics Canada to allocate those persons to various denominations who do not respond to the question on religious affiliation in the census.

III. METHODOLOGICAL CONSIDERATIONS

The Muslim population, like that of any other religious group, is composed of three elements; migration, natural increase and conversions. Migration is the net result of immigration and emigration. How much contribution this component makes to the populattion depends upon the forces governing the influx and out- flux of Muslims. While Canada experiences very large in-migration, it also undergoes substantial out-migration. This pattern of movement also characterizes Muslims but there is no evidence to suggest that out-migration in their case is anywhere near the magnitude (emigration relative to immigration) experienced by the Canadian population, as a whole.

The natural increase in population depends on the number of births and deaths. The number of births is a function of fertility rates and age distribution of women. Death rates are determind by the age composition of the population. If age structure of the population is biased in favour of the younger people, the mortality rate will be lower. Consequently, a population, characterized by a high percentage of young age groups, implies higher fertility rates and more births, and lower death rates, making the potential of natural increase in the population high.

Conversions generally take place as a result of missionary work and inter- religious marriages. As Islam allows marriage with Christian and Jewish women and as men coming from Muslim countries outnumber women by a wide margin, the potential of conversions through marriages cannot be left out of consideration. Furthermore, changing life-style and out look of the young people in the North American society and a better organization of the Muslim communities and emergence of Islamic centres, offering interested non-Muslims facilities to acquaint themselvs with Islam, have enhanced the prospects of conversions.

A. Sources of Immigration

Since immigration is, by far, the dominant source of Muslim population in Canada, this component calls for special attention. As most of the Muslim im-

migrants come from the Muslim countries, the first test is to identify these countries.

1. Muslim Countries

Muslim countries have been selected on the basis of a purly statistical criterion. A country is deemed to be a Muslim country if the majority of its population claims adherence to Islam. However, a country may have a Muslim majority and yet non-Muslims may preponderate. This situation will arise where a country has more than two religious groups and non-Muslim groups together surpass Muslims. In some rare cases, where other relevant factors were also taken into consideration, some of these countries have been included in the list prepared for this study. Apart from these exceptions, the absolute majority rule has been strictly applied in the selection procedure.

The task of identifying Muslim countries is not an easy one. It is wrought with a number of stubborn problems. In some of these countries, a census has never been taken. Therefore, one has to rely upon estimates which, unfortunately, offer quite a wide choice. For example, the population of Afghanistan has been estimated at anywhere between 13 and 20 million in 1977. This problem is not likely to be resolved, though it may be alleviated, by a census because a very large proportion of the population, estimated at about 20 per cent, is comprised of nomads who do not have a permanent residence and keep moving from place to place, sometimes crossing into the borders of neighbouring countries.

Secondly, census is generally undertaken every ten years. Since, it is normally conducted in the first year of the decade, the most recent available statistics pertains to 1971; any data available for years after 1971 represents, in most cases, estimates and not actual population. As various publications give estimates for different years, it is not, at all, surprising to find sizeable differences in figures cited in publications. Discrepancies may also arise from differences in assuptions, made by the authors of these publications, in preparing their estimates.

Thirdly, the religious composition of population poses additional problems. The breakdown of population by religion cannot be estimated with as much accuracy during the intercensal years as total populattion and even in the census the statistics on religious composition is subject to a higher degree of error than is the total population. This problem is much more acute in African countries where the widespread practice of animism and tribal faiths has attracted the

Muslim and Christian missionaries who are hard at work to convert people to their respective faiths and are claiming success.

However, in so far as this study is concerned, these difficulties need not deter us here. As will be noted in the course of discussion, these problems are not of such a magnitude, from the point of view of our task, as to impair the quality of our results and detract from their accuracy. Moreover, they are not peculiar to this study; they are encountered in all the work on the demographic characteristics of the population of these counties.

The above considerations preclude a concensus on the exact number of Muslim countries. Some of the countries, which are estimated to have a preponderance of Muslims in their population according to some sources, are regaded as non-Muslim by others. Such disagreements are generally confined to African countries and are easy to understand as will be explained later in this chapter. At any rate, it is obvious that some rules have to be formulated to overcome or circumvent these difficulties.

The procedure of identifying the Muslim countries, listed in Table I, was as follows. Ten publications of international circulation were consulted. From each sourse, a list of those countries was prepared where the Muslim had the absolute majority.There were six countries (Cameroon,Ethiopia,Ivory Coast, Tanzania, Togo and Upper Volta) in respect to which there was a disagreement over whether the Muslim population constituted absolute majority or not. In such cases, if at least two sources concurred that the country in question had an absolute Muslim majority in the population it was selected for inclusion in the list. Furthermore, the ethnic origins of the population of these countries were studied and independent inferences were made about the religious composition of the population. As further verification, affiliations of these and their countries with international organizations, primarily designed to bring together the Muslim countries, were utilized. The largest association of this nature is the Organiztion of Islamic Conference, based in Jeddah, Saudi Araba. According to the latest information available at the time of writing, the Islamic Conference has a membership of 41 coantries. As this information is somewhat dated, the membership is likely to have risen. Since then Djibouti has emerged as an independent state on the world map and has already joined the Arab League. It is, therefore, quite probable, that it has become a member of the Islamic Conference.

The test of membership in the Islamic Conference to help in deciding whether a country is Muslim or not is a very valid one.

Table 1
MUSLIM COUNTRIES
THEIR TOTAL AND MUSLLM POPULATION

Country	Total Population		Muslim (%)	
	Year	('000)	Low	High
1 . Afghanistan	1976	17,050	99	99
2 . Albania	1975	2,432	70	73
3 . Algeria	1975	16,776	92	100
4 . Bahrain	1975	226	90	99
5 . Bangladesh	1976	78,664	85	78
6 . Cameroon	1976	7,500	20	55
7 . Comoros	1973	295	100	100
8 . Chad	1975	4,030	52	85
9 . Djibouti	1976	220	100	100
10. Egypt	1975	37,233	90	91
11. Ethiopia	1974	27,801	50	65
12. Gambia	1975	524	84	90
13. Guinea	1975	4,416	75	85
14. Guinea-Bissau	1976	910	35	50±
15. Indonesia	1975	130,597	94	94
16. Iran	1976	32,900	98	98
17. Iraq	1976	11,505	90	95
18. Ivory Coast	1975	6,673	23	55
19. Jordan	1976	2,750	90	91
20. Kuwait	1975	990	99	99
21. Lebanon	1974	3,100	42	57
22. Libya	1975	2,444	96	100
23. Malaysia	1975	11,900	51	65
24. Maldive Islands	1974	129	100	100
25. Mali	1976	5,842	56	80
26. Mauritania	1972	1,180	100	100
27. Morocco	1975	17,305	90	95
28. Niger	1975	4,852	85	89

Table 1 (Cont)

Country	Total Population		Muslim (%)	
	Year	('000)	Low	High
29. Nigeria	1975	62,925	50	75
30. Oman	1973	750	99	100
31. Pakistan	1976	73,368	97	99
32. Qatar	1975	250	99	110
33. Saudi Arabia	1974	7,012	100	100
34. Senegal	1976	5,085	80	85
35. Sierra Leone	1975	3,002	60	70
36. Somali	1976	3,170	98	100
37. Sudan	1973	14,172	82	95
38. Syria	1976	7,585	80	87
39. Tanzania	1975	15,155	−50	65
40. Tunisa	1975	5,772	93	100
41. Turkey	1975	40,198	98	98
42. United Arab Emirates	1977	750	99	100
43. Upper Volta	1975	5,773	20	55
44. Yemen Arab Republic	1975	6,472	99	100
45. Yemen, Peop. Demo. Rep.	1976	1,743	97	98
TOTAL		683,466	83	88

Source: Author's Compilatcn

But it should be remarked that although the objectives of this organization are oriented towards the solidarity and well-being of the Muslim world, the countries where Muslims are not in majority but are influential in the political and economic life can become members. Of the six countries listed above, whose religious composition is in dispute, Cameroon and Upper Volta are in the Islamic Conference. Though the membership, in itself, does not imply that more than 50 per cent of the people living in these countries claim allegiance to Islam, it does caution us against accepting too low a figure as some publications would have us to believe. With this evidence, supplemented by other relevant information, we are led to the conclusion that the publications, according to

which only 20 per cent of the inhabitants of Upper Volta and Cameroon are Muslim, contain a downward bias.

In view of the vast differences encountered in various publications concerning the proportion of Muslim population in some of the countries, it is appropriate to make a few very brief remarks which will put these figures in a proper perspective. There are eight countries concerning which there are rather sharp disagreements among various sources. It is noteworthy that seven of them are located in Africa and this is not merely a coincidence. For most of these countries, it is fairly difficult to arrive at an accurate figure for total population, let alone the religious composition. For example, in 1972, the official statisics put the population of Guinea at 5.1 million but three years later in 1975 the United Nations estimated it at 4.4 million. Changing geographical lines, large movements of population across borders, civil wars, large segments of population without permanent residence who migrate from region to region in search of livelihood and the problem of disputed territories render statistician's job extremely difficult. All these factors also bear upon the religious composition of the population. But there is an additional factor which makes estimation of the religious distribution even more tedious.

As pointed out above, in many of these countries, animism and tribal faiths have been or still are the dominating force. This is particularly true of the countries mentioned above. Consequently, both Christian and Muslim missionaries have concentrated their activities in these areas and both are claiming success. Hence, it is not realistic to assume, as most of the publications do, that the religious composition which prevailed ten or even five years ago is still valid. Where these sources have attempted to take into account this changing phenomenon they have simply consulted religious organizations whose estimates are not likly to be better than educated guesses and are perhaps tinged with upward bias. Most probably, these sources are Chistian as Muslim missionary work is not so well organized. An example of this bias is found in an article in the Newsweek which states that there are 6 million coptic Christians in Egypt. If this figure is taken as a percentage of Egypt's population, it comes to 15 or 16 per cent, implying that the Muslims comprise no more than 85 per cent. Yet, none of the ten publications that this author has consulted places the Muslim percentage of Egypt's population at less than 90 per cent.

2. Immigration from Muslim Countries

Table I shows that, according to the lowest estimates, 83 per cent of the pop-

ulation of Muslim countries follows Islam; the rest is accounted for by other religions. Given the strong relationship between ethnicity and religion observed in the Canadian population and noted in the previous chapter, it may be assumed that most of the immigrants coming from the Muslim countries are adherents of Islam. This assumption generally holds but there are some excptions.

During the 1950's there was a large outflux of Armenians from Egypt and of the Jews from Morocco. While little statistics is available for Egypt, the Jewish population of Morocco declined very sharply, from 160,000 in 1960 to 31,000 in 1971; the population of foreigners of all nationalities fell from 400,000 to 122,000 in the same period. From the cross- classification of the Canadian immigration statistics, it is possible to separate the number of Armenians coming from Egypt and that of the Jews coming from Morocco. Between 1956 and 1966, 38 per cent of all the immigrants from Egypt to Canada were Armenians and in some years this share was as high as 46 per cent. In the same period, 70 per cent of all the Moroccans admitted to Canada as permanent residents were Jews and in 1964 they accounted for 87 per cent of the immigrants from Morocco. These are the only two major countries among those from where Muslims come to Canada which have a predominantly Muslim population but have not cotributed to the growth of Muslim community in Canada commensurately.

Because of the very large international mobility it is not necessary that immigrants coming from a country start their journey from home country. The phenomenon of international mobility has been assuming increasing proportions in the world generally and in the Middle East particularly whose massive financial resources have attracted people from all over the world in very large numbers. The size of these movements can be judged by the fact that the native people of Qatar, Kuwait and United Arab Emirates are out-numbered by immigrants by a very wide margin. Exact figures are not available (and are difficult to compile) but educated guesses suggest that in Qatar and the United Arab Emirates, the nationals comprise only about one-fourth to one-third of the population. The corresponding figure for Kuwait is put at 40 per cent. The estimates for Saudi Arabia and Bahrain show that the nationals constiute a much larger proportion of the population and are placed at 70 and 75 per cent respectively. However, the presence of very large nuber of foreigners in these countries who may be migrating from there to Canada does not pose a serious problem for estimating the number of Muslim immigrants because most of the aliens in the above-mentioned countries are from fellow Muslim countries like Yemen, Palestine, Iran, Egypt, Iraq, Jordan and pakistan.

3. Immigration from non-Muslim Countries

It is needless to say that Muslims, who migrate to Canada, do not necessarily come from Muslim countries only. There are very sizeable Muslim minorities in many countries of the world. For example, Islam is the second major religion in Russia, after the Russian Orthodox Church, though the exact number of its followers, who live in Central Asia and Kazakhistan, is not known. It has been estimated that there are around 10 million Muslims in China. There are large Muslim communities in Eastern European countries, especially Bulgaria where they constitute approximately 14 per cent of the actively religious population. However, migration from these countries to Canada is so meagre that the possibility of any significant number of Muslims coming from there, with the important exception of Albania, is very slim, though it must be noted that a considerable number of Muslims came from some of these countries in the earlier years.

The Western European countriers are an altogether different matter. In many of these countries there are substantial numbers of the followers of Islam. The growth of these communities is due to a large number of people who moved from their native Muslim countries and settled in Europe as well as conversions which took place in good numbers. In this respect, France, Great Britain and West Germany merit special attention. There are three-quarters of a million Algerians living in France and it is, therefore, reasonable to expect some of them to be among the immigrants coming from France.

Islam has a large following in Britain but no reasonable estimates are available. The number of Muslims is said to be between one- third of a million and one million, though the overwhelming weight of evidence favours a number towards the upper limit. It is pertinent to point out that some of the publications with a very large international circulation put the number of Muslims in Great Britain around 300,000. While it must be acknowledged that it is merely an estimate and subject to some erorr, it can gain currency simply because of the wide circulation of the publication and can become established and sacred through common use. However, there exists sufficiently strong evidence to prove that the number of Muslims in Great Britain is much higher than 300,000. According to the Office of Population Census and Surveys, the population of pakistanis (including Bangladeshis) reached 246,000 in mid-1976. Recognizing that these people are overwhelingly Muslims, concidering that there are numerous other countries from which Muslims have migrated to Britain and noting that Islam had considerable appeal and has won over a large number of the British,

by the admission of numerous prestigious publications, it is obvious that a figure of 300,000 must be out-rightly rejected as too low.

A good number of Turkish workers is scattered throughout Europe. It is estimated that there were 810,498 Turkish workers in Europe in 1974 and most of them, 649,257 were in West Germany. The rest, in declining order, were in Austria (36,900), Netherlands (24,862) Belgium (14,864) and Switzerland (7,130). A cross-classification of the immigration statistics, giving the number of permanent residents of these European countries entering Canada on one hand and the countries of their citizenship on the other, permits us to sort out the number of Algerians, Turkish and Muslims of other nationalities arriving from these countries of Europe.

Finally, there are two Asian countries, India and Philippines, where there are Large Muslim communities and from where a substantial number of immigrants live in Canada. The Muslims constitute 11 per cent of the population of India and 7 to 12 per cent (some sources put it at even higher than that) of that of the philippines. The number of Filipino Muslims is likely to be extremely small in Canada because,given that they are a rather backward minority so far as educational facilities are concerned to the rest of the population in the philippines, they are less likely to apply and qualify for immigration which lays emphasis on education and skills. On the other hand, a good number of Indian Muslims can be found in this country. A sizeable number has also been coming from the West Indies.

B.Emigration of Muslims from Canada

Not all the immigrants who come to Canada stay here permanently. Some of them move to other countries and some return to their native lands. It can be said with certainty that the ratio of emigrants to immigrants for Muslims is much smaller then that for the Canadian population as a whole. A rough estimate of this ratio can be obtained by comparing immigration statistics with census data. For examle, the number of persons born in Pakistan and India, as shown in the 1971 census, was 17 per cent below the figure obtained from immigration stiatstics. This 17 per cent does not purely represent out-migration. Some, but very little of it, is accounted for by deaths. Out-migration in the order of 15 per cent seems to be a reasonable estimate for the period 1966-1971. In the following five years, 1971-1976, out-migration as a proportion of in-migration was slightly less than the previous period for Canada, as a whole. Ac-

cordingly, we have assumed that the Muslim emigration declined in commensuration with that of the total Canadian population.

C. Natural Increase

An analysis of the role of natural increases in the growth of Muslim population in Canada requires estimates of fertility and mortality rates. While mortality rates depend upon the age structure of the population, fertility rates of women are determined by their age composition, duration of marriage as well as attitudes towards family planning. These factors are reflected in significant differences in fertility rates among various denominations. These rates are much higher among Mannonite, Hutterite, Salvation Army, Pentecostal and the Roman Catholic women than other denominations. The number of children born to Romen Catholic women is 44 per cent higher than that born to women professing no faith. The fertility rates among Mannonite and Hutterite women are 86 per cent higher than those among Jewish women and 67 per cent higher than those among the Presbytarian women.

It is assumed that mortality rates among Muslims in Canada are Lower than in the country as a whole because much of the growth in Muslim population took place through immigration after 1967 when the immigration policy favoured persons under 35 years of age. Thus one should expect Muslim population to be wighted in favour of younger age groups. This consideration also suggests a higher fertility rate. In short, it appears reasonable to argue that the rate of natural increase is somewhat greater for Muslims than for total Canadian population.

IV. A CENTURY OF MUSLIM SETTLEMENT, 1971 - 1976

The Muslim community has grown from 13 persons in 1871 to 69, 300 in 1976. Islam now ranks as the third largest religion in Canada, after Christianity and Judaism, and the number of Muslims exceeds that of the adherents of numerous Christian denominations.

The Muslim population grew quite rapidly throughout the 105 years of recorded demographic history, with the exception of the years covering the two Wold Wars. However, the total number remained small until the late 1960's when reforms in the immigration policy began to attract a large number of persons from Muslim countries. Until the Second World War the size of the Canadian Muslim community was no more than 1,000 persons. In the mid-1960's, as it became increasingly obvious that the Canadian population could not meet the rising demand for skilled and professional labour force, Muslims began to arrive in relatively large numbers to fill this need. By 1971, they were an integral and useful part of the Candian mosaic and had made an imprint on the artifacts of the Canadian culture, In one hundred years, their number increased from a mere 13 in 1861 to 33,370 in 1971. In the following five years, their population is estimated to have more than doubled and reached 69,300 in 1976.

In the following discussion, three phases are identified in the growth of Muslim population in Canada. The choice of phases is determined by the characteristics which one wants to analyze. As the purpose of this study is to estimate the population and compare it with other religions, the considerations of availability of data and comparability with other relevant demographic variables have dictated the choice.

A. The Early Settlers. 1871 to Second World War

The Muslim settlement in Canada is as old as the Canadian Confederation itself. The first census, taken in 1870-71, recorded 13 'Mahometans'. They all lived in Ontario. There were 2 in Essex county, I in Brant and 10 in Wellington. The concentration of the early settlers raises the possibility that they may have been a closely knit proup or may have belonged to one family. There is no infor-

mation avilable about their socio-cultural background or national or ethnic origins. This should prove to be an intersting topic to explore.

In the next sixty years, the Muslim population increased but growth was marked by erratic movements. By 1931, their population had reached 645. In the six decades, 1871-1931, the Muslim population reached its peak in 1911 when they numbered 797. In 1921, a sharp decline was recorded and the number of the followers of Islam dropped to only 487. The following decade witnessed some increase, with population recovering and rising to 645 but the peak obtained in 1911 was not to be reached again until after the Second World War.

Table 2

A CENTURY OF MUSLM STTLEMENT IN CANADA 1871 - 1976

Year	Muslim Population
1871	13
1901	47
1911	797
1921	478
1931	645
1971	33,370
1976	69,300

Source : Cenus of Canada and Author's Estimates.

It is noteworthy that the decade 1911-1921 was the only period throughout the 105 years of the recorded history of the introduction of Islam into Canada when the Muslim population declined. A number of factors could explain it but the large magnitude of the decrease, which amounts to 40 per cent, suggests that many Muslims responded to the call of national duty and offered their services to defend and fight for the high ideals for which many fellow Canadians laid down their lives in the First World War, 1914-18. Conversations with the officials of the Department of Veterans Affairs confirm that the Muslims fought in the First World War but the number of those who fought or those who

died could not be ascertrained. The Department of Veterans Affairs was very kind to offer this author facilities and their full co-operation to conduct this investigation but financial resources were not enough to delve into very valuable aspect of the Muslim history.

During this early period of settlement, there were no stable sources of increases in Muslim population. Increases in population take place when immigration exceeds emigration or fertility rates of women are higher than the mortality rates of the community. Little natural increase could be expected as men outnumbered women by an extremely wide margin. For example, in 1921, there were only 90 women in a total population of 478, giving a ratio of 4 men to I woman. This ratio was unusually lop-sided as many men may have died in the First World War a few years earlier. The sex ratio improved, as expected, in the following years but still remained quite high. The imbalance between male and female population clearly suggested that if any reproduction was to take place, it would have entailed inter-religious marriages. But it is not unrealistic to argue that possibility of mixed marriages was extremely slim, if not virtually non-existent. Marriages of non-Muslim women to Muslim men would have carried a forbidding stigma on both religious and ethnic grounds in those days. It may also be hypothesized that quite a few of the early settlers were married men who, at the time of migrating to Canade, must have anticipated difficulties of estabishing themselves in a new country and had left their families behind in their native countries with the hope of bringing them when the prospects were better. Also, to the extent that there were single men, they may have returned to their native countries to find brides and then came back with their families. That this hypothesis is tenable is borne out by substantial improvement in the male-female balance in the population in the subseqent years. However, there is little doubt that in spite of the marked improvement in the sex composition, the imbalance persisted and slowed down growth in the numbers of the Muslim community. With a reasonable balance between male and female population, natural increases would have been larger and hence population would have increased at a faster pace.

B. post-Second World War Era

The growth of Muslim population in Canada after the Second World War has been determied and shaped by immigration, and its ethnic composition is largely the outcome of the changing Canadian immigration policies. Prior to 1962, the immigration policy laid emphasis on geographical origins in the selection

procedure and the quota system restricted the number of Asians and Africans who could enter this country. As these two continents are the main sources of Muslim immigration, the number of Muslims coming to this country remained at very low levels and so did the Muslim population, . Even when immigration from Muslim countries reached any sigificant levels, a very large proportion of these arrivals was non-Muslims. Between 1956 and 1962, at least 45 per cent of all the Egyptians coming to Canada and 48 per cent of the Moroccans were non-Muslim; in some years these shares rose to 67 per cent. The early Muslim settlers were mainly of European origins, who came from Albania, Turkey and Yugoslavia, and Arabian ancestry who traced their backgrounds to Lebanon and Syria.

Though the Canadian immigration policies played a principal role in determinig the size of the Muslim population and its ethnic composition the internal conditions in many of the Muslim countries preceding and immediately following the Second World War also may have exerted a strong influence. Many of these countries were either still engaged in the struggle for independence or were just emerging from it.

By the beginning of the 1960's, most of the main influences that had acted as deterrents to migration from many African and Asian countries disappeared or lessened in their severity. As far as internal conditions were concerned, they were more settled. People were acquiring higher education and skills and the revolution of rising expectations was setting in. Communication media and gradual contraction of the world into a global village brought information about opportunities elsewhere, beyond the national boundaries, within the reach of more and more people.

On the front of the Canadian immigration policy, geographical origin as a determinant of one's eligibility for admission to Canada came to be de-emphasized, quotas were abolished and in 1962, education, skills and ability to adapt, along with a host of other factors, became the criteria for selecting permanent residents. These developments aided in migration from the Middle East, Africa, South and South-east Asis, the regions with very large Muslim population. The liberalization of new policies and their reinforcement with the introduction of objective criteria in 1967 resulted in a peak of the Muslim immigrants entering Canada in 1968- a peak that was not to be reached again until 1973 when general amnesty was announced for all those who were in the country on non-immigrant visas.

1. 1966 to 1971

Between 1966 and 1971, the Muslim population grew very rapidly but at steadily declining rates. During this period, it more than doubled and stood at 33,370 in 1971, increasing at an annual compounded rate of nearly 18 per cent, compared with a total growth of 8 per cent over the five year period in the Canadian population. An overwhelming portion of this increase occured on the strength of immigration. But there were other factors also which tended to increase Muslim population at a faster pace as compared with other denomintions.

Firstly, emigration of Muslims from Canada occurred at about half the rate which characterized the total Canadian population. Secondly, several factors point to the possibility of higher fertitity rates among Muslim women and lower mortality rates in comparison with the Canadian average. In addition to numerous other factors, the stracture of Muslim population was heavily weighted in favour of younger age groups and implied higher birth rates and lower death rates.

Thirdly, there was the role of conversions. Though its magnitude is difficult to quantify at this stage, it can be inferred from the age and sex composition of the Muslim population that this influence would have been present at least through inter- denominational marriages, if not through general appeal of Islam to many young men and women who were beginning to show some dissatisfaction with their parents' faiths and were experimenting with other religious creeds and doctrines. The number of Muslim men exceeded that of women in marriageable age groups. Though many of these surplus men returned to their native countries to find a bride, some of them married women of other faiths. This is made easier for Muslims by permission in Islam to marry Christian and Jewish women. The phenomenon of inter-religious marriages is all too obvious in Muslim gatherings.

It is impossible, at this stage, to determine the number of conversions to Islam in Canada either through marriage or conviction. The Muslim organizations do not keep such records. It must be recognized, of course, that it is not for associations to compile statistics on people who embrace Islam by conviction. However, the number of such people is not likely to be large enough to make any statistically significant contribution to the Muslim population. The demonstration effect conversions, which is so obvious in the United States, is

not present in Canada. Such household names as Muhammad Ali (in boxing), Ahmad Reshad of Minnesota Vikings (in football), Kareem Abdul Jabbar of los Angeles Lakers (in basketball) and Iman, one of the top female models in New York, which are splashed in the communication media almost every day in the United States, have no equivalents in Canada. In cases where conversions did take place in Canada, old names were retained. On the other hand, as far as additions to Muslim population through inter-religious marriages are concerned, it is relatively easy to keep track. Some Muslim associations, in the province of Quebec, keep records of marriaes, births and deaths.

Over these years, 1966-71, there was a marked decline in the growth rate of Muslim community in Canada. This was expected, of course, in view of the fact that the base of population was expanding. The rate of increase steadily decelerated throughout this period and dropped from a peak of 27 per cent in 1965-66 to 12 per cent in 1970-71. It was only during the first two years of this period that the growth rate was above the annual copounded rate; in the remaining three years, increases were well below the average. As has been noted above, immigration was the dominant factor in determining the growth of the Muslim community and hence population moved in tandem with the flow of immigrants. The variations in the pattern of the growth of Muslim community reflect changes in the inflow of Muslims from other countries.

The number of Muslim immigrants dropped sharply, after attaining a peak in 1968, and hit the lowest level in 1971. The Muslim migration in that year was nearly 10 per cent below the average inflow during 1967-71. The economic considerations in Canada led to a decline in immigration into the country. However, some of the decline in Muslim immigration was offset by natural increases which began to assume a greater role as a sufficient number of persons had reached the reproductive age and were getting married and bearing children.

As growth was slowing down towards the end of the 1960's and early 1970's, the mix of population was also changing. Most of the deceleration was among the Egytians and Morccans. On the other hand, sizeable increases occurred in the numbers of Pakistanis, Malaysians, Indonesians, Lebanese and Indians.

2. 1971 to 1976

While the rate of increase in the Muslim community during 1966-71 proceeded at a steadily declinig rate, the growth in the following five years was marked by erratic movements but did not diverge much form the trend rate of

increase. The average growth rate during this period decelerated to 16 per cent, down from 18 per cent in second half the 1960's.

The first half of the 1970's experienced some unforeseen developments which accounted for fluctuations during this period. First, about 5,000 Ugandans were admitted to Canada, with a very large number of Muslims among them, as refugees in 1972. Same year, the Government of Canada announced that those who had entered the country before November, 30, 1972 and did not have the status of a permanent resident could apply for an immigrant visa until October 15, 1973 and would not be subjected to the point system and would be treated very leniently. About 50,000 persons responded. While it is not known how many Muslims were there among these applicants, the amnesty programme was certainly a contributing factor in the large increase in the number of Muslims in 1973. Besides, a new element was introduced that year-the arrival of a considerable number of Muslims from Tanzania. This influence has been persistent since then and has become a major force contributing to an increase in the population. Sizeable increases also occurred in the numbers of Muslims from Egypt, Morocco, Indonesia, Iran, Pakistan and India. As the amnesty progamme came to end, the influx of Muslims slowed down in 1975 but remained at a high level by historical standards. Consequently, the rate of increase in population dropped well below the average of the period in 1975 but was still higher than that experienced in 1971, the year of the lowest growth since 1966. Again in 1976, the ravages of civil war in Lebanon forced many people to leave their homes and many of them arrived here.

Apart from the increases in the number of Muslim migrants, there was another factor at play during the period, 1971-76. There was a decline in the rate at which the muslim immigrants to Canada were leaving for other countries or returning home. It is very difficult to assess this magnitude but a study of all Immigrants shows that while about 31 per cent of all the immigrants coming to Canada left for other countries during 1966-71. This rate dropped to 25 per cent in the next five years, 1971-76. This pattern also characterized Muslims but in their case, these rates were substantially lower.

C. Muslims in the Canadian Religious Spectrum

Although the Muslims have yet to receive recognition in the statistical publications, their population has already exceeded the followers of some denominations. In 1971, the Canadian Muslim population surpassed the number of

Adventists, Buddhists, adherents of Christian and Missionary Alliance, Disciples of the Churches of Christ, Confucians, Dukhobors, Free Methodists, Hutterites and Unitarians. By now, they may have overtaken a few other denominations as their number has continued to outpace the total Canadian population. It is not possible to make comparisons for 1976 because the religious distribution of the population is not available for that year. On the basis of the number of followers, Islam has now emerged as the third largest religion in Canada, after Christianity and Judaim, and Muslim population has risen to a size to be reckoned with.

In the 1960's, the Muslim population increased at a pace unmatched by any other religious group with the exception of the Jehovah's Witnesses who kept pace with them. The number of Muslims rose at an annual compound rate in the order of 20 per cent which is about the same as the total increase in the Canadian population over 10 years between 1961 and 1971. It should be noted, however, that the phenomenon of the rapid growth is not peculiar to the Muslims. It characterized other denominations when the base of their population was small and even a moderate increase in their numbers through immigration or otherwise tended to produce high growth rates. One of the major reasons for the rapid growth of Muslims relative to other denominations lies in the behaviour of emigration. The emigration rates are substantially higher among older population (defined in tetms of number of years lived in Canada) than among the new immigrants. Since an overwhelming proportion of the Muslim population is comprised of new immigrants, the emigration rates are much lower among them. Thus assuming that immigration adds to all denominations to the same degree, differences in emigration rates can produce ccnsiderably different population growth rates. Natural increases can also account for this phenomenon. In addition to such factors as duration of marriage and attitude towards family size, a first glance at the data suggests that the age structure of the Muslim population is more conducive to higher birth rates and lower death rates as compared with other denominations. Conversions, especially through inter-religious marriages, may also have played some role.

Table 3
POPULATION OF CANADA BY RELIGIOUS DENOMIATION, 1971

Religious Denomination	Population
Adventist	28,690
Anglican	2,543,180
Baptist	667,245
Buddhist	16,175
Christian and Missionary Alliance	23,630
Christian Reformed	83,390
Confucian	2,165
Disciples of Churches of Christ	16,405
Dukhobor	9,170
Free Methodist	19,125
Greek Orthodox	316,605
Hutterite	13,650
Jehovah's Witnesses	174,810
Jewish	276,025
Lutheran	715,740
Mennonite	168,150
Mormon	66,635
Muslims	33,370
Pentecostal	220,390
Presbyterian	872,335
Roman Catholic	9,974,895
Salvation Army	119,665
Ukranian Catholic	227,730
Unitarian	20,995
United Church	3,768,880
No religion	929,575
Total Population of Canada	21,568,310

Source :Census of Canada and Author's Estimates

V. GEOGRAPHICAL DISTRIBUTION, 1871 - 1876

The original pattern of the settlement of Muslims in Canada gave Ontario an early advantage over other provinces with respect to the numerical size. In 1871, there were 13 Muslims in the country and all of them lived in Ontario. Within the province, they were distributed as follows:

County:	
- Essex	2
- Brant	1
- Wellington	10
- Total	13

In subsequent years, as the population began to increase, it also began to spread and by 1901, Muslim settlements could be found in all provinces except the Maritimes. Ontario maintained its first position but now it had to share it with those parts of the Northwest Territories which were later to become Alberta and Saskatchewan, with both Ontario and Territories accounting for 15 Muslims each out of a total of 47 in the country; there were 10 in Quebec, 6 in British Columbia and I in Manitoba. In the next three decades, the pattern of regional settlement altered substantially. This shift was marked by a number of noticeable features. Firstly, the adherents of Islam had also spread to the Maritimes in 1931 though prince Edward Island remained an exception. Secondly, Ontario lost its position as the centre of Islam in Canada and it had no more than 55 out of 645 Muslims, or less than 9 per cent. Thirdly, there was such a massive movement towards the West that in 1931, 76 per cent of the Muslim population was living in the praries and British Columia, and every province west of Manitoba had more than twice as many Muslims as Ontario, with Saskatchewan alone accounting for 30 per cent, followed by British Columbia (21 per cent) and Alberta (20 per cent).

This westward movement which began in the last quarter of the 19th century, slowly at first but gaining strong momentum in the first quarter of this century, came to an end in the early 1930's. The agricultural boom that started with the

opening of Alberta and Saskatchewan for settlement and development at the beginning of the 20 th century ended with the depression in 1931. The allure of the prairie provinces vanished or, at least, diminished and the Muslim farmers, faced with unpromising prospects for agriculture which forced many bankruptcies, set out towards the industrial, business, commercial and financial centres of Quebec and Ontario. The effect of this inter-provincial migration, which is likly to have been meagre, was reinforced by quite a different pattern of settlement among new immigrants, and by the mid-1960's, Quebec emerged as the centre of Muslims in Canada. In this phase, which was highlighted by emergence of Quebec as the province of Muslim concentration, cultural pluralism and bilingualism also played a very important role.

In the second half of the 1960's, a shift began to occur towards Ontario, and the prairie provinces began to recover some of the lost ground. Economic factors provide the theme of this new pattern.There was also a shift in the sources of Muslim immigration and linguistic proximity, which tended to influence the choice in favour of Quebec in the 1950's, tilted the balance towards Ontario. Quebec's 'quiet revolution', which was beginning to find expression in violence, may also have been a contributing factor, not so much by way of causing out-migration as by discouraging in-migration. By 1971, exactly one hundred years later, Ontario had regained its position of dominance and was home to 58 per cent of the Canadian Muslims.

A. Settlement in the West, Early 20 th Century

The regional distribution of the Muslim population is presented in Tables 4 and 5. It is obvious that in the first three decades of this century, Muslims were concentrated in the three Prairie provinces of Saskatchewan, Alberta and Manitoba. Altogether, they accounted for half of all the Muslims in 1921 and 1931, with the lion's share going to Saskatchewan. In 1921, 238 out of 478 Muslims lived in these provinces and in 1931 their share came to 355 out of a total population of 645. These early settlers must have been very zealous as by 1938 they had erected the first Canadian masjid (mosque) in Edmonton. These people are believed to have arrived from the Balkan states of Albania, Yugo-slavia, Turkey and Bulgaria and from the Middle Eastern countries, particularly Lebanon and Syria. Whether they came from their native countries by air or by sea, the nearest disembarking points in Canada were the Eastern provinces of the Maritimes and Quebec and Ontario. Logically, they would have been expected to settle in these provinces. It is curius, then, why they decided to move

to the Western provinces, several hundred miles away from the eastern and the central ports of entry.

Before we offer brief and cursory comments on this phenomenon, it should be remarked that the high concentration of Muslims in the Prairie provinces was not entirely the result of inter-national migration. There were other factors that may also have contributed. For example, between 1921 and 1931, Ontario's population declined from 77 to 55 and Nova Scotia also experienced a slighe decrease. While the exact reasons for the drop in the Muslim populatien in these provines are not known, nor has anyone tried to explore them (some of them may have died and as there were only 2 women out of Muslims in Ontario, the number of births, if there were any, was not enough to offset the number of deaths) one may conjecture that some of them migrated westward. Furthermore, the sex composition of the population in the prairies was much more balanced than elsewhere and hence the chances of a higher rate of natural increase were better there.

Table 4
MUSILM POPULATION BY PROVINCE
1871 - 1976

	1871	1901	1921	1931	1971	1976
Newfoundland					70	113
Prince Edward Island					60	80
Nova Scotia			40	37	617	1,040
New Brunswick			10	9	277	464
Quebec		10	31	45	8,383	13,541
Ontario	13	15	77	55	19,375	40,478
Manitoba		1	31	36	591	1,001
Saskatchewan			144	193	491	1,252
Alberta			63	126	2,303	5,683
British Columbia		6	82	136	1,335	5,579
Territories		15		8	30	69
Total	13	47	478	645	33,370	69,300

Source : Census of Canada and Author's Estimates

However, there appears little doubt that international migration played a role. Whether this meant Muslims coming from the neighbouring American states or from their native countries, the question still remains why they went to the Prairie provinces.

Table 5
PROVINCIAL DISTRIBUTION OF MUSLIMS IN CANADA (%)
1921 - 1976

	1921	1931	1966	1971	1976
Newfounfland			0.1	0.2	0.3
Prince Edward Island				0.2	0.1
Nova Scotia	8.4	5.7	1.1	1.9	1.5
New Brunswick	2.1	1.4	0.6	0.7	0.7
Quebec	6.5	7.0	49.4	25.1	19.5
Ontario	16.1	8.5	40.5	58.1	58.4
Manitoba	6.5	5.6	1.1	1.8	1.5
Saskatchewan	30.1	29.9	1.0	1.1	1.8
Alberta	13.2	19.5	2.7	6.9	8.2
British Columbia	17.2	21.1	3.6	4.0	8.1
Territories		1.2		0.1	0.1

Source : Census of Canada and Author's Estimates

The explanation can be found in the occupational characteristics, which were inextricably intertwind with the immigration policy and the opening up of Alberta and Saskatchewan for settlement and development. In practice, admission to Canada in those days was limited to the British and American citizens, with sufficient means to maintain themselves, their wives, children and fiancees. The only non-Anglo-Saxons, admissable for permanent residence were farmers with sufficient means to set up independent, self-employed farming. It is thus obvious that if a non-Anglo-Saxon wished to enter Canada as a permanent resident, he could do so as a farmer. This explains why the early Muslim settlers were farmers.

As farmers, they preferred not to settle in the Maritime provinces of prince Edward Island, Nova Scotia and New Brunswick because other regions promised better prospects and unless their port of entry was Halifax, there was little likelihood of their settling in these provinces. If they wished to go to Quebec, they had to reside in rural areas where they could have encountered language problem because French was the most widely and commonly used language. Thus the choice was between Ontario and the prairies. Although Ontario was more developed and centrally located, it did not have the promise that the prarries held. The provinces of Alberta and Saskatchewan had been opened up in 1905 and there was a vast expanse of agricultural land waiting to be brought under cultivation. It was this open frontier that awaited and attracted these enterprising and hardworking pioneers.

B. Shift to Quebec, Second World War to the 1960's

After the Second World War, the regional pattern of Muslim settlement in Canada began to change makedly and the centre of Islam shifted from the West central Canada. By 1966, nearly, 90 per cent of all the Muslims were living in Quebec and Ontario and most of the remainder were in British Columbia and Alberta. A number of factors was responsible for bringing about this change. Firstly, the lure of Alberta and Saskatchewan had begun to wane. The depression of 1931 was accompanied by a large number of agricultural bankruptcies. Though the agricultural prospects were grim every where, the prairies had experienced the most spectacular expansion and increase in farm land acreage and the number of farmers affected by the downturn was relatively large. There were few other employment opportunities to which the farmers could turn because the econmies of this region were entirely based on agriculture. Secondly, after the Second World War, industrialization began to spread but remained concentrated in Quebec and Ontario. Thirdly, immigration policy underwent

important changes and, with the emphasis on education and skills in 1962 as qualifications for admission to Canada, sources of immigration diversified and occupational characteristics broadened.

While these developments favoured central Canada, there were other considerations which gave Quebec a slight edge over Ontario, Montreal, in addition to being the biggest and the most cosmopolitan city, was also the commercial financial heart-beat of the country. Montreal's Mc Gill University opened an Islamic Studies Institute in 1952. These factors, in conjunction with a particular mix of Muslim immigrants which included a sizeable number of francophones, tilted the balance towards Quebec. There is little doubt that economic factors dominated the course of this movement but the role of cultural diversity and bilingualism in the emergence of Quebec as the centre of Islam in the 1960's cannot be ignored.

C. Concentration in Ontario, 1970's

The late 1960's witnessed another shift in the regional pattern of the Muslim settlement in Canada. This new emerging pattern was reminiscent of the early Muslim settlement around the turn of the 20 th century and mainly affected the provinces situated west of the Ottawa Valley. This shift was very lop-sided as all the provinces increased their shares of the Muslim population at the expense of Quebec. However, the number of Muslims increased in all provinces and the Territories without exception but Ontario, Alberta and British Columbia made the strongest gains. In 1976, 94 per cent of all the Muslims lived in only four provinces- Ontario, Quebec, Alberta and British Columbia. Ontario emerged as the leader, accounting for more than 58 per cent of the Muslims (or 40, 478) and although Quebec ranked second, its share fell far below the level of 1966. Muslim population in other provinces in 1976 is shown below:

Muslim Population in Canada, 1976

Newfoundland	133
Prince Edward Island	80
Nova Scotia	1,040
New Brunswick	464
Quebec	13,541
Ontario	40,478
Manitoba	1,001
Saskatchewan	1,252
Alberta	5,683
British Columia	5,579
Territories	69
TOTAL	69,300

A number of events took place in the late 1960's and early 1970's which brought about these changes. As far as Quebec was concerned, conditions were quite unsettled in the province during this period and the Federal Government invoked the War Measures Act. Although there was a net out-migration from Quebec in these years, the number of Muslims leaving the province is uncertain and not possible to estimate. While Muslim out-migration cannot be ruled out, it cannot be said with certainty that it was due to the unsettled conditions. During this period, unemployment was also beginning to rise and Muslims, being mostly professional and skilled wokers who have a greater propensity to respond to employment opprtunities , may have left the province. However, these developments may have deterred many more Muslims, who were immigrating to Canada from their native countries, from going to Quebec. It seems therefore, that the relatively slower growth of Muslim populatuon in Quebec was due not so to out-migration as to a slower in-migration. The effect of these events was reinforced by a change in the mix of Muslim immigrants in which the share of francophone Muslims declined over the years, primarily, as number of Muslims coming from francophone countries did not keep pace with others as a result of a shift in the sources of Muslim immigration.

These people, who left Quebec or who were discouraged from going there, settled in Ontario, Alberta and British Columbia. These, being,the richest provinces, also offered better employment prospects. Alberta continues to enjoy some of the lowest unemployment rates in the country and has been one of the fastest growing and diversifying economies in the country in the past decade or-so.

VI. OCCUPATIONAL CHARACTERISTICS, 1971 - 1976

The occupaticnal charateristics of a community reveal more about its educational, social and economic characteristics than any other single attribute. Since occupations are directly linked to education and training, they tell us about community's educational and social background. As a close relationship exists between occupation and earnings, a knowledge of the occupational distribution sheds light on the economic well-being and status of its members. Occupations also indicate whether the community is likely to live in the rural areas or in the industrial and urban conurbations. This chapter briefly discusses the Muslim labour force and its occupations for two years 1971 and 1976.

A. Labour Force

In 1967, out of a total Muslim population of 69,300, there were 32,155 persons who were either working or were actively seeking emplоment. In other words, 46 per cent of the Canadian Muslims were in the country's labour force. The rest of the population was comprised of students and trainees, housewives, senior citizens and children. The comparable labour force figure for the total Canadian population was 45 per cent in 1976. It means that for every 55 Canadians who were not working or were not able to work, there were 45 persons who were there to support them directly or indirectly; among Muslims, there were 54 dependents who could rely on 46 persons working or seeking work.

The Muslim labour force, expressed in relation to the total population, declined from 47 per cent in 1971 to 46 per cent in 1976. While some of this change may be attributed to the error of measurement, it should be conceded that there were forces at play during this period which could account for a decline in the proportion of the Muslims entering the job market. Firstly, the larger number of workers who had migrated to this country in the late 1960's were es-

tablished and being joined by their families, causing a downward movement in the worker - dependent ratio. Secondly, as unemployment began to increase in 1975 and 1976, many people who could not find employment after long seach may have decided to return to training and educational institutions to upgrade their skills and qualifications and hence dropped out of the labour market.

It is interesting to note that during this period when the ratio of Muslims entering the labour force dropped, quite the reverse behaviour was observed with respect to the tolal Canadian population. This phenomenon can be traced to economic as well as sociological development. The movement for women's liberation and rights brought about changes in the life-style of the society and women began to enter the labour force. Between 1971 and 1976, male labour force rose by 14 per cent versus 30 per cent for women in Canada. The behaviour of the Muslim labour force vis-a-vis the women's liberation movement is touched here as it involves a host of social, cultural and economic factors and is not within the terms of reference of this study.

B. Occupations

In 1976, 32 per cent of the Muslim labour force was comprised of professionals. They were followed by skilled workers qualified for employment in manu facturing industries who constiuted 21 per cent. As can be seen from Table 6, close behind were the clerical and sales occupations with 20 per cent. Managerial skills and business enterprises accounted for about 6 per cent. There were 1,060 construction workers whose share of the labour force came to 3 per cent. This occupational distribution, with a preponderance of professional and technical and skilledworkers, points to high educational attainments among Canadian Muslims and a tendency to settle in urban-industrial conurbations like Toronto, Hamilton, Ottawa, Mttawa, Montreal, Vancouver and Edmonton.

Table 6

OCCUPATIONAL DISTRIBUTION OF MUSLIM POPULATION 1971 and 1976

Occupation	Number		% Distribution	
	1971	1976	1971	1976
Managerial and Business	567	1,771	3.6	5.5
Professional	5,702	10,304	36.2	32.0
Clerical and Sales	3,119	6,311	19.8	19.6
Commerce and Finance	961		6.1	
Services and Recreation	788		5.0	
Transport and Communication	126		0.8	
Agriculture	205	419	1.3	1.3
Construction	473	1,063	3.0	3.3
Fishing	5		-	
Mining	16		-	
Manufacturing	3,197	6,665	20.3	20.7
General Labour	252		1.6	
Total Labour Force	15,750	32,200		
Labour Force as% of population	47.2	46.5		

Source : Author's Estimates

Note: A blank space means estimates not available.

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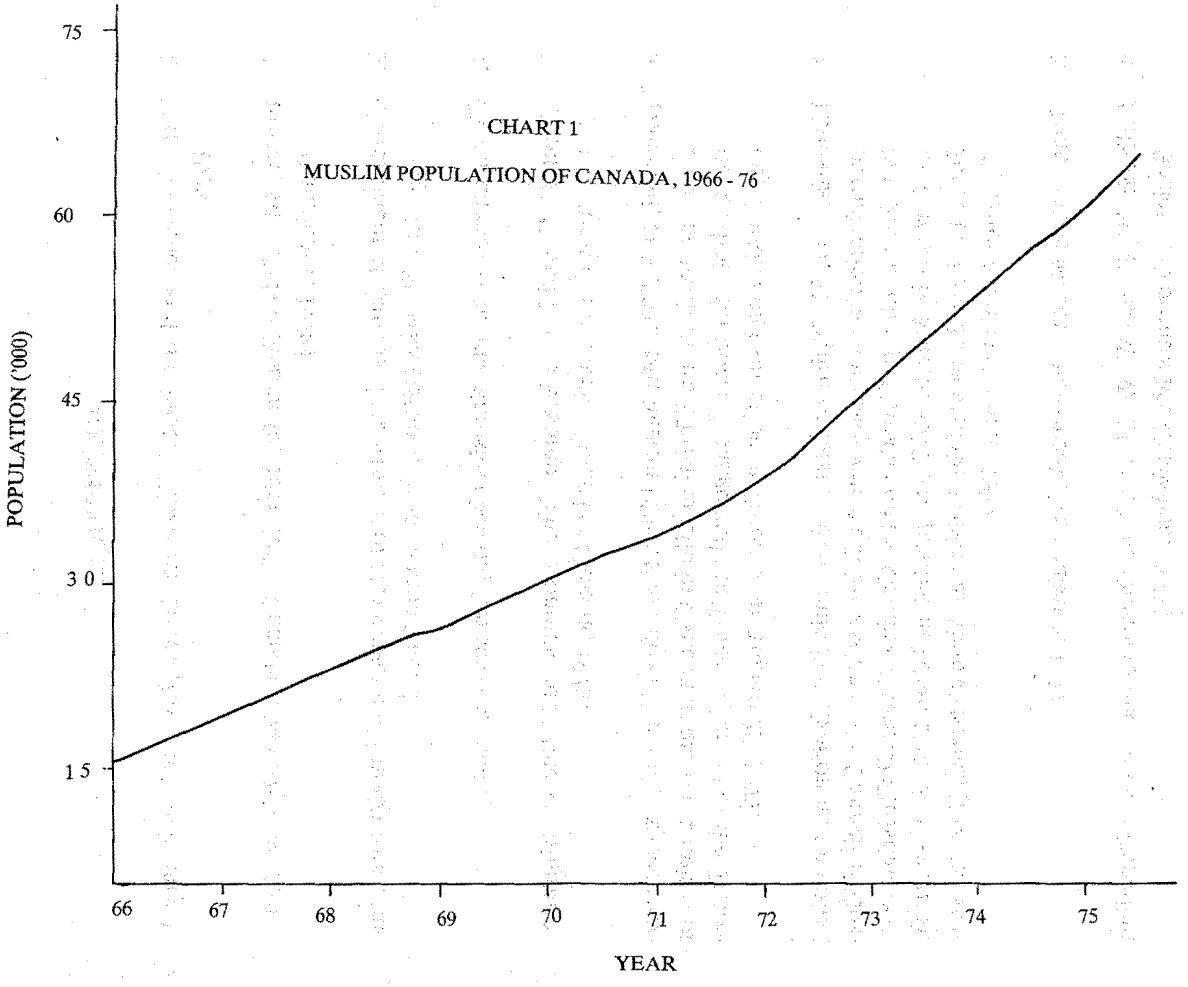
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CHART 1

MUSLIM POPULATION OF CANADA, 1966 - 76



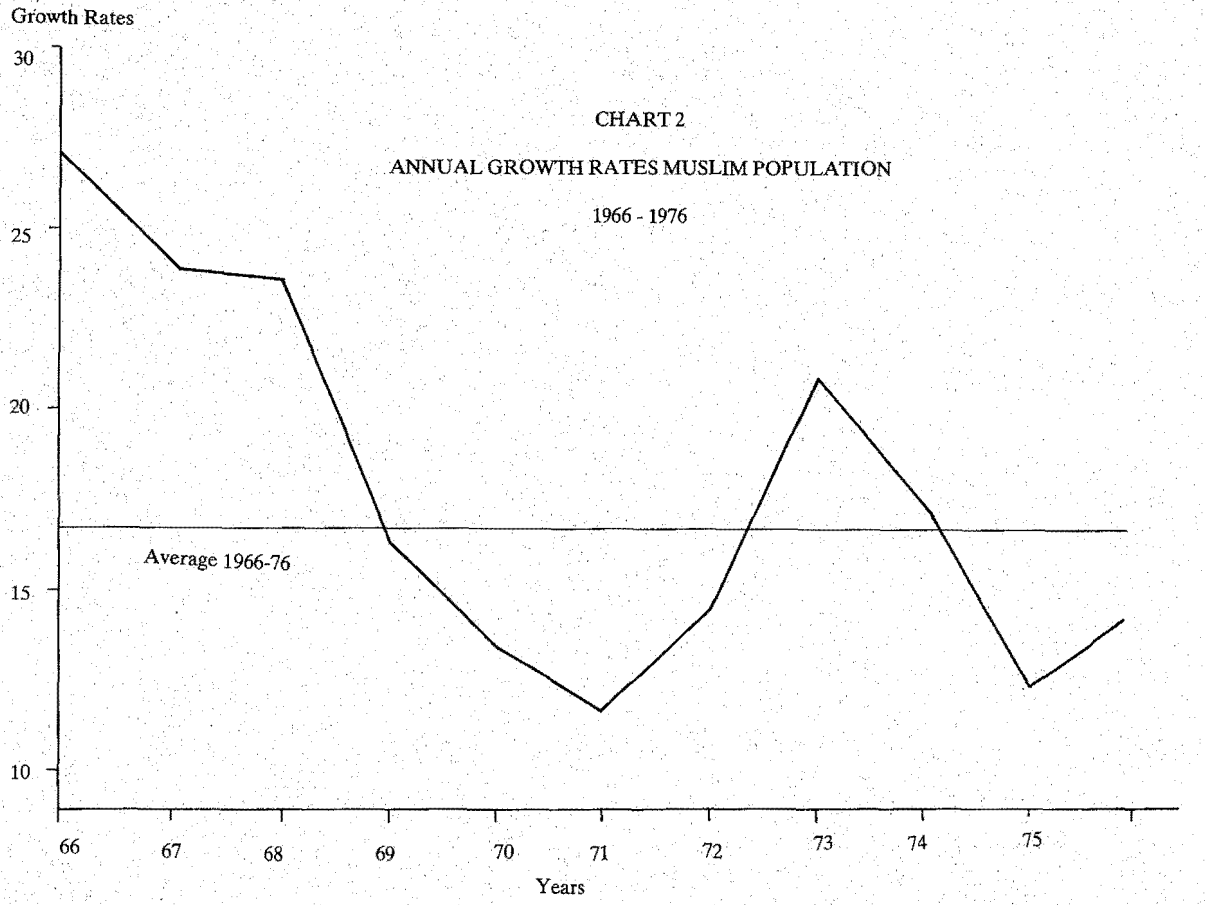


CHART 2

ANNUAL GROWTH RATES MUSLIM POPULATION

1966 - 1976

MANLAND RELATUONSHIPS IN BANGLADESH

BY

M. AMINUL ISLAM

1. INTRODUCTION AND OBJECITVES

Bangladesh is essentially agricultural in character, perhaps more intensively cultivated than any other country in Monsoon Asia. Agriculture is, and has always been the mainstay of the area., Beginnings of sedentary agriculture date back to pre-Aryan times. Here we find community whose prosperity has long depended largely upon the products of the land. Agriculture in this country has remained as a tradition, a profession and above all a way of life.

Today, Bangladesh, with a few cottage industries and with only beginnings of modern industry, remains predominantly agrarian, the urban population constituting only about eight percent of the total population.[1] With limited land resources and a large population of over eighty million Bangladesh is faced with the most challenging development problems . Study of the pattern of resource use and the future needs are necessary pre-requisites for obtaining any self sufficiency in the country. This study examines the nature of relationships that exist between man and land in Bangladesh under the present level of technology. Its special concern is to study the underlying factors which have been sigificant for the present relations between man and land in Bangladesh.

2. MAN - LAND RATIO

In an agricultural country, such as Bangladesh, it is evident that the roles human beings are allowed to play depend significantly on a highly significant ratio sometimes referred to as the man-land ratio. In 1974 Bangladesh had a population of 71'5 million in an area of 55,598 sq. miles.[2] By any standard this is too large a population for the area. In fact, the population of the country has been increasing very fast over the last hundred years or so causing increasing demand on the limited land resources. In 1881 the density of population was 465 persons per square mile and by 1974 it rose to 1286.[3] Fourteen out of nineteen districts in the country today have a density figure higher than the national average. When smaller areas are considered, pressure on the land is more discemible.

The density of rural population in Bangladesh is one of the highest in the world, probably exceeded only by Java and Madura, parts of South China and the Nile valley. The per capita distribution of land in Bangladesh is 42 acres, while the per capita distribution of cultivated land is only about'38 acres. But when cultivated land per capita of agricltural population is taken into consideration, Bangladesh ranks one of the lowest in the world. This shows the extreme

pressure of population on land, that is less than one third of an acre of cropped land in Bangladesh supports one "average person'.

The magnitude of the problem is emphasized by the fact that with yields which are extremely low in comparison with other parts of the world Japan or Taiwan-the land itself is unable to sustain the population even at a subsistence level. Compared to its size with a large population rising to about 100 million in 1985[4] Bangladesh faces the most challenging problem emanating from man-land relationship. In addition, the problem is aggravated further by the low standard of the diet and undernourishment on the part of the rural population.

3. LAND UTILLIZATION

In Bangladesh the total available land is estimated to be 35'2 million aces, and about 60 per cent of the total area in a normal year is cultivated.[5] A little more than 40 per cent of the cultivated land is sown more than once in a year (Table 1). However, there has not been much change in the net cropped area over the years. But owing to multiplecropping the gross cropped area has registered some increase, from 28' million acres during 1964-65 to 31'1 millon acres in 1975-76.[6] The cropping intensity during the period rose from 133 per cent to about 148 per cent.[7] The significant aspect of the land use in Bangladesh is that most of the cultivated land is devoted to food grain production and almost nothing is devoted to pasture and animal production.

As the major food crop, rice is grown on nearly 81 per cent of the total cultivated area[8] and by far the largest part of it is consumed locally and that by the producers themselves. Less than 3 per cent of the cultivated acreage is devoted to other grains. Jute, the main cash crop of Bangladesh occupies only about 6 per cent of the total land area under crops.[9] Cash crops such as tea, sugarcane and tobacco, together occupy only about 3 per cent of the total cultivated area.[10] Other minor food crops are grown as a supplement to rice lands which are of little significance in the land use pattern of Bangladesh.

3'1 Types of Farms

Agricultural land use in Bangladesh lends itself broadly to a twofold division:

(a) small - scale peasant farming

(b) large scale, primarily European origin, plantation farming.

With the exception of plantation farms, there is hardly any distinction in size

between a large and a small farm. These small farms are primarily family- type farms, that is, farms on which the bulk of labour is provided by family members with little or no hired labour. The head of the family is generally a farm operator and worker at the same time. Most of the crops are grown in mixed fields rather than pure, and multiple cropping and interculture are common characteristics. The number of different crops grown on small farms is often very large.

Tea is Bangladesh's outstanding plantation crop, but is a relatively small enterprise having only sbout 109,000 acres under total area.[11] Practically the entire output of the plantations is intended for export, while that of the peasant farms is for both domestic consumption and export.

In addition to peasant and plantation agriculture, shifting cultivation is practiced in the Chittagong Hill Tracts region by certain tribal groups. Locally, shifting cultivation is known as Jhuming and henceforth will be called jhum cultivation.

Thus, at present, agricultural landuse in Bangladesh is oriented towards the production of food crops, especially rice, and is characterized by the division of rural land into very small peasant farms. These farms and their associated crops are distributed, to a certain extent. in regional groupings. Moreover, the existing small holdings are further divided into a number of tiny plots for the cultivation of a variety of crops. In effect, the use of land and the type of farming are basically determined by the natural condition, modified to a certain extent by socio-economic factors such as transportation, marketing and tenure of farms. Physical factors, such as climate, soil and topography determine which enterprises may be readily followed.

3'2 Farming Seasons

On the basis of the seasonality of rainfall three distinct but partly overlapping cropping seasons can be recognized: (a) Rabi season (dry winter months), from late October to March- April, when about two inches of rainfall occurs. The crops associated with this season are boro rice, various pulses, vegetables, sugarcane, sweet potatoes and various oil seeds. Besides, there are other minor food crops, such as wheat, miscellaneous rabi crops (onion and garlics etc.) grown in this season. (b) Bhadoi or kharif season, which extends from late March to the end of August or early September. About fifteen inches of rainfall

occur before the 'bursting'of the Monsoon in June. Aus rice and jute, the major cash crop of Bangladesh are the two important crops grown in this season. Besides these, some kinds of oil seeds (e.g. summer til) are grown. (c) Aghani or Haimantic season, which is roughly coexistent with the true monsoon period. Aman rice is the most important crop of this season. It has both broadcast and transplanted varieties. Aman is sown in March (broadcast type) or in July-August (transplanted type) and harvested in November- December.

In connection with the seasonality of the farming system, river floods and their effects have to be mentioned. The seasonal pattern of farming activities in the different seasons vary on account of drysess in the rabi season or excessive rainfall in the Aghani or Haimantic season. Under normal conditions, however, river floods often compensate for the deficiency of moisture in the soil at the end of the rainy season (November); where late floods are not available to extend the growing season, farming activities become less significant during the dry season. The cultivation thus depends either upon the hydrological state of the soil or upon the availability of water for irrigation.

4. ECOLOGICAL ZONES AND CROPPING SYSTEMS

The agricultural practices, as have evolved in rural bangladesh, are manifestations of an adjustment process between the natural use system and the human use system at large. The traditional Bengali peasants have evolved methods of farming which are well adapted to diverse environmental conditions with their seasonal rhythm of drought and flood. Farmers' perception of the environment, chiefly the land, with its rainfall and its flood, determines the pattern of resource use, particularly the cultural practices affecting the use of land.

Bangladesh consists primarily of a large alluvial basin floored with Quaternary sediments deposited by the Ganges and Brahmaputra rivers and their numerous associated streams and distributaries. But there is a considerable physiographic variety with the country despite its generally low relief. Each variety lends itself to a particular crop or distinctive cropping sites and in so far as the farmers recognize these qualities, a positive relationship between physiographic sites and different crops develops. Thus, the different farming sites, for most part, may conveniently be related to physical factors, i.e. physiography, effect of flood water, soil associations and types and rainfall. However, along with the distinctive cropping sites, within the major physiographic sites there exists a notable degree of consistency as cropping intensity and rural population densi-

ty supported by agricultural land and resulting crop - associations (Table 2). The ecological zones with their respective crop specialisations fall into four major groups. In the summary that follows, some minor regions have been ignored.

4'1 Highlands

Only in the east and south east in the Comilla and Chittagong areas are there highlands (tertiary and older) of considerable altitude. These highlands range from a few hundred feet to about 2,000 ft. above sea level. The folded Chittagong Hill Tract Ranges are densely forested and coarsely populated. Because of the rough terrain and the hill people's indifference to plough cultivation, jhuming (migratory cultivation) of the forest is the main activity of the people. Only along the valley floors, however, does permanent cultivation become evident. But most of the tea plantations are located on tertiary hills. In general, the tertiary hills do not contribute much to the overall food production of the country.

4'2 Pleistocene Areas

There are two major areas of pleistocene sediments which lie within the Bengal Basin. These are known as the Barind and the Madhupur Jungle. These were classified as pleistocene due to their sedimentary properties and physiographic expression. These areas, as may be noted, remain high above the active flood plains and are not usully flooded during the rainy season. Pleistocene sediments are well oxidized and typically are reddish, brown or tan, and are mottled. They commonly contain ferruginous or calcarious nodules. Water content is lower, resulting in firmer, more compacted material. Organic material in Pleistocene sediments is commonly confined to the surface soil profile. Pleistocence areas offer less diversified cropping system.

4'2'1 The Barind

The Barind occupying the west central part of Bangladesh, namely in the districts of Rajshahi, Bogra and Dinajpur, is the largest of the Pleistocene areas. Its surface has a domal appearance and rises 20 to 40ft. above the flood plains. Divided into several parts by the rivers the Barind has been laboriously terraced for aman rice cultivation.

The soils in the Barind Tract bake too hard during the summer season so that only after sufficient rain is it possible to cultivate the land. Thus, it affords only one crop a year, transplant aman being dominant land use. During the winter season drought is a major handicap. The cropping intensity as well as the population density is very low as compared with the average for the country as a whole.

4'2'2 The Madhupur Tract

Occupying over 1500 square miles of the central part of Bangladesh, the Madhupur Tract rises from 20 ft. in the east and south to 100 ft. in the west. Scores of old abandoned stream channels called 'baids'are found all over the area. The 'baids' are the most important agricultural lands of the area. The major part of the Tract is, however, covered with forests.

Land use is closely associated with soils and hydrological conditions. In the depression areas (baids), where rain water sufficiently accumultes, only aman paddy is cultivated, which explains the low rural population density in this area. The deep terrace soils are mainly used for aus or mesta, locally groundnut, followed by early rabi crop, and jackfruit trees are common. The shallow terrace soils, for the greater part, remain under qajari forest. Grey terrace soils are used for aus and transplanted aman; aus and T. aman on deeply flooded land. Boro is in the lower parts of the valley remaining wet throughout the dry season.

4'3 The Recent Flood Plains

The Recent flood plain deposits occupy most of the area of Bangladesh. The Recent deposits are composed of the combined deltaic masses and flood plains of the Ganges, Brahmaputra and Meghna rivers. This vast area falls into four categories, viz, (1) Alluvial fans, (2) comilla surface, (3) Sylhet basin and (4) Deltaic plain.

Recent deposits are, in general, characterizd by typically dark, loose compacted material with a high water content and with variable but considerable quantities of organic materials. These areas are more or less subjected to flooding, with the exception of certain areas, especially in the western districts. Although floods are inherently a great threat to cultivation, they are also benefi-

cial in that they increase soil fertility through the deposition of silt and clay. On the quality of the flood waters depend various kinds of farming systems, as the nature of floodwater largely determines the kind of crops to be grown, either for subsistence or for cash. As the quality of the floodwater differs in different parts of the country, there develop different farming systems with regard to either commercial or subsistence orientation. In effect, in the "core areas" that is, in the areas where the Ganges- Brahmaputra-Tiste river system carries enormous amount of silts; jute and other non-food crops grow abundantly and there are diversified cropping systems. In effect, the river levees are very intensively cultivated and multiple-cropping is practicd on them. The intensity of cropping decreases as one moves from the levees to the 'bils' or backswanios. The 'bils', if permanently covered with water, remain uncultivated otherwise they are mono-cultural areas giving one crop during the dry season.

4.3.1 Alluvial Fans

Alluvial fans cover the major parts of Dinajpur and Ranjpur districts. The rivers draining down the Himalayas had built alluvial cones. They coalesced and later were covered by a layer of sediments to form the piedmont plains. The piedmont alluvial plain comprises an old part of the Tista alluvial fan with a braided river landscape. Almost the whole landscape, except the highest ridges, lies wet or shallowly flooded in the monsoon season. The rivers of the area merely drain the local rainfall bringing no fresh alluvium or soluble nutrients to the region. Soil moisture deficit is also a notable feature in the area. The area no longer affected by Tista floods, aman monoculture, particularly transplant aman and sugarcane to a certain extent, results in very low density of population than the average for the country as a whole. Cropping intensity is also at a very low level here.

4.3.2 Comilla Surface

The Comilla surface is a distinct alluvial physiographic unit. Comprising the districts of Comilla and parts of Noakhali, the stabilised flood plains with a flat clay lowland stand perhaps four to six feet above the adjacent flood plains of the Meghna river to the west. The sediments of the Comilla surface correspond roughly with the clay pan and are slightly oxidized. However, the soils are not regularly refertilized by inundation. In fact, only along the western flank does the plain get regular inundation from the Meghna. Also along its eastern mar-

gin streams from Tripura Hills in India bring a certain amount of flood water into parts of this area.

The general crop-combination type is that of mixed aus and deepwater aman or jute, partly followed by rabi crops. However, the area is practically co-terminous with the aman aus double rice cropping. Since water supply is assured, there being long rainy season, and the soils being clayey as well as retentive of rain water, two paddy harvests are possible without recourse to irrigation. High to very high cropping intensity as well as population density set this region apart from other regions of Bangladesh. Besides, high rural population density seems to have favoured the double cropping of aman aus, and in gereral, very intensive use of land. The area has an advantage especially in Comilla, as far as jute cultivation is concerned which supports partly the agricultural labour force.

4.3.3 The Sylhet Basin

The Sylhet basin occupies roughly the depressions bordering the eastern Mymersingh and western Sylhet, which is also the heart of the Meghna basin. The lowest part of Bangladesh, the Sylhet basin lies under water for more than six months of the year with the underlying sediments being clay. Further, large marshy areas cover the basin and are completely unsuitable for agriculture. This is also the region of large lakes.

The Meghna depression is noted for its boro cultivation which has supported a low density of population. Cropping intensity is naturally low, as the area remains under flood water for such a long time that it is only in the dry winter season that farming is possible. Further, cultivation of aman or jute is handicapped by the occurrence of early floods including flash floods.

4.3.4 The Chittagong Coastal Plain

The Chittagong coastal plains occupy the narrow strip of land between the Chittagong Hills and the sea, together with the Halda, lower Karnaphuli and lower Sangur floodplains, and that of the off-shore islands. At the sea margin mud flats floods have developed. Inland, the usual levee and 'bil' topography of Bangladesh flood plains have developed. The area is often subjected to shallow flooding and to flash from the hills. It is also exposed to tropical cyclones, and the associated storm surges.

Although the coastal strip has a moderate fertile clay soil, ingress of saline water at hightides is a major handicap. In the interior valleys sandy loams and clays predominate which are fertile and rich in organic matter. However, on acount of salinity, jute cultivation is practically insignificant. Aman. aus, particularly the cultivation of trasplant aman is the major use of land. The Northern. Chittagong cast supports a very high density of population.

While the northern strip is characterized by the double cropping of T. aman and aus, transplant aman cultivation is practically a monoculture in the south. Cropping intensity is also low in the south. In terms of the cultivated area, however, population density appears to be medium to high. With increased population pressure the entire region might become a double rice cropping region.

4.3.5 The Mid - Tista - Jamuna - Old Brahmaputra Stabilised Plains

This is a very large region in which high cropping intensity is widespread. Population densities are in the upper medium and high categories. Aman - aus jute is the charactristix cropassociation type,but aman often occupies a greater area than either aus or jute. This is an area where soils get fertilised. regularly from the rivers surrounding the area. In winter season various kinds of rabi crops are grown. Diversification of crops including the practice of Multiple-cropping in the entire area are the characteristic agricultural aspects of the region.

4.4 The Deltaic Plain

The Deltaic plains are largely drained by innumerable distributaries off the Ganges. It has such a gentle slope and the interfloves have so slight a relif that the river ceiss- cross each other and have developed a complex river system. The topographic features are similar to those of the flood plains except that the relief is more subdued. The delta proper can be divided into three categories, viz, (1) moribund, (2) mature and (3) active. Within the deltaic plains there are discernible variations in cropping systems.

4.4.1 The Moribund Delta

The moribund delta, the western part of the deltaic plain, bounded on the

east by the Madhumati river comprises the areas which extend from the northern boundary of the Khulna district to Jessore and parts of Kuchtia district. This area lacks the important effect of the flooding from the Ganges and is characterized by rivers that are now abandoned or drying up. These have lost connection with their parent streams. The rivers having now no off-take from main streams cannot bring down enough water and silt, even in flood, and being confined within high levees, are not in a position to inundate the entire area. As a result land building has ceased and the delta has grown moribund upto this limit.

In this region of Broadcast aus and rabi crop association besides paddy, agriculture is at its low level. Largely because of river decay and dryness in winter season cropping intensity is more often low than medium, and is sometims very low, population density is likewise low .

4.4.2 The Mature Delta

The mature delta comprises the saline non-forested areas in the northern part of the district of Khulna. In the mature delta, although the land is suitable for cultivation, salinity is a major handicap, especially in the early part of the summer (March-April-May) Only after the monsoon rain in June when the salt content is washed away from the land, is it possible to cultivate crops. Consequently, the cropping intensity is very low. Mainly transplanted are the major land use of the area. Population density, excepting the nearby urban centres of Khuina, is low from Bangladesh's point of view. On the whole, the saline delta is completely monocultural of transplant aman paddy. Cropping intensity is consquently very low which supports a low density of population.

4.4.3 The Active Delta

The active delta consists of the Sunderbans and the country bewteen the Madhumati and the Meghne estuary, roughly the districts of Patuakhali, Bakerganj and Faridpur which are considered the deltaic lands per excellence.

The Sunderbans are negative areas as far as cultivation of crops is concerned, and they are almost devoid of habitation since they are not open to settlement, excepting the northern fringe which is being reclaimed. In addition, salinity is a major handicap for agriculture.However, this tidal forest region of great eco-

nomic significance extends inland for about 60 to 80 miles. Along the seaface the forest is almost compesed of mangroves, which often extend into tidal water, but elsewhere are separated from the sea by a line of low sand hills or dunes.

The non-saline tidal delta and estuarine charlands and islands constitute a sort of transitional region to the saline delta. Cropping intensities are generally medium but range from low to high. Population densities show a similar range. Double rice (T. aman-aus) cropping predominates, but the crop is often displaced by rabi crops. Orchards, particularly of betelunt and coconut give this region individuality. However, in the southern part of the Bakerganj and Patuakhali district salinity is also a handicap precludes cultivation of crops other than paddy during the rainy season.

The northern part of the Bakerganj district as the entire Faridpur district is well inundated by rivers and has a diversified cropping system. On account of the rich soil, which gets enriched annually by the deposition of silts, cropping intensity is very high and multiple cropping is the characteristic farming practices of the area. The population density is likewise high. However, within the region two areas evoke special interest. The Ganges levees and charlands which are similar to the moribund delta in having Broadcast aus- T. aman and rabi crop associations, have a high cropping intensity with high population density. The other region, that is, the Ganges- Lower Mehgna plains and charlands merge imperceptively with the mid-Tista - Jamuna - Old Brahmaputra Stabilised plains and charlands. Cropping intensity is medium to high or very high in some areas within it as is the range of population density. With its deepwater aman- jute - rabi crop (aus to a certain extent) associations this is among the most productive agricultural regions in the country.

4.5 Land Level and Land Use

Nost floodplain areas are not level. They generally consist of a succession of broad ridges and depressions varying in size and shape. The range in elevation between them is quite variable. Besides, raising of lands by farmers to make it safe from flooding during the monsoon season with consequent lowering of land have gone on throughout the centuries. Today, everywhere several levels of land can be recognized with as many as five levels in recently deposited floodplains to two or three levels in other areas of the country. Although they are not necessarily contiguous, each one has its own elevation and can be iden-

tified from the others by a height of one or two feet. The cropping on each of the various levels is determined by (a) the frequency of flooding and effectiveness of drainage, and (b) the amount of silt deposited by flooding. Thus the relationship between cropping practices and flooding of land in particular accounts for the most part the complex land use pattern that has evolved so far in Bangladesh, the process is essentially complicated in detail owing to differences in soils, flood incidence and local cultural parctices.

4.5.1 Homestead Land Or Bhiti

The particular adjustment to the flooding may be regarded as structural adjustment. One such unit is the level of land on which the village stands. A transect across the village land from the highest to the lowest ground manifests various levels of land, the highest in the gradient is locally known a bhiti. Each level of land differs in terms of their physical characteristics and uses.

Homesteads are bhiti or level of the homestead which remains in general above the normal flood level. Homestead land or bhiti is also extensively used for a wide range of fruit trees, vegetables and spices. By looking at the level of the bhiti land one can infer about the height of the flood water during normal floods. The bhiti is raised by a few inches at least every year to protect it from the erosion caused by rain during the monsoon season. The practice of raising land has created ponds or small depressions which are used for various activities including washing, drinking, and fishing.

The structaral adjustment often involves building of homestead structures or raised platforms of earth or plinths. An elaborate care is necessary to protect both the bhiti and the platforms from being eroded. The knowledge of their upkeep, like that of many others of the Bangladeshi rural life, has been transmitted through generations over many centuries.

4.5.2 Highlying Land

Highlying lands, flooded infrequently, are generally given over to the B. Aus rice and jute, sown in March-April, where flooding is at best shallow particularly before harvest in July - August. It is then followed by an early rabi crop. both jute and aus cannot thrive in deep standing water. Jute lands, for example, might be classified on the basis of high, medium and low levels. It is on the

high level of lands that the tossa variety is grown and to extent, where demand is great, middle levels are also devoted to tossa variety. White variety occupies the low and middle lands. By June-July low and middle come under water. As the jute jute plants cannot tolerate excessive amount of standing water, it demands high levels and there it competes with the aus crop.

The decision to grow aus or jute in the Bhadoi season depends upon farmer's perception of the environment, particularly the depth and nature of flooding, and perhaps, also on the farmers' traditional or cultural preferences.

The lands given to aus rice and jute can also be given over to other crops during the dry season. But in the dry season lack of water is a limiting factor. There fore, the dry season cropping is largely confined to those areas where irrigation facilities are available. In areas where the dry season crops (rabi crops) can be grown without irrigation, rabi crops are grown only if they conform to their traditional values.

T. Aman is grown on poorly drained high - rising land where flooding is not deeper than a few feet after transplantation in July-August. Floodplain lands of thin kind are generally used for B. Aus and T. Aman in specific cases. Small raised beds are done to elevate the land above flood levels for vegetable production. This kind of land is also used for aus as well as for sugarcane. Broadcast varieties are generally grown in deeply flooded areas and transplanted varieties in moderately flooded areas.

4.5.3 Middle Land

Poorly drained middle land is, in fact, used for growing variety of crops e. g. B. Aus or jute followed by T. Aman and rabi crops. In many cases jute is followed by an early rabi crop without an intervening aman crop. In medium lowland, particularly in lowland ridges and basin margins, jute displaces, in some cases, both mixed aus aman, and sometimes is intersown with aman in place of aus. Where irrigation is practiced a boro or T. Aus crop is usually grown and is followed by T. Aman.

4.5.4 Low Land - Deeply Flooded

Deep water B. Aman is grown on deeply flooded land, but it cannot be

grown in very deeply flooded land or on lands where flood water level rises too rapidly. This type of land can only produce floating variety of aman rice which is sown broadcast before the floods come. By the time the floods commence, they are 6 to 10 inches high and then continue to grow as fast as the floods rise. It has been noted that this variety of rice will grow by more than 6 inches in twenty four hours in case the flood water rises at that rate. They attain a height of 15 to 16 ft. and keep their heads above the flood water. At any rate, on deeply flooded lands, as it is practiced, particularly for spreading over the risk, aus and deep water aman are commonly sown intermixed. The aus is harvested in July-August and aman continues to grow with the rising floodwater to be harvested after the recession of flood water in October-Novmber. This practice of insurance against risk of crop loss of any one variety is a vivid example of cultural response to natural environmental conditions.

4.5.5 Very Deeply Flooded Lands

The very deeply flooded lands can produce at best one crop. These are the lands where flooding takes place early in the premonsoon season and recedes late in November. Some of these lands remain free of water only for three to four months (November-February). They are deeply flooded that the longest of the known varities of rice-the most tolerant crop grown in Bangladesh- will get submerged under the flood water. Therefore, no crop is grown in these lands during the rainy season. However, during the dry season such lands are given over to the production of boro rice which is sown from November to January and harvested from February to May. It is also grown in depressions and abandoned river channels.

5. CONCLUSIONS

This study shows regionally the geographical equilibrium that has been reached between land and rural population in Bangladesh. In a country such as Bangladesh where so many are dependent directly or indirectly upon agriculture for the livelihood of the people and where agricultural products comprise almost the total value of exports, it might be expected that there would be a geographical relationship between agriculture and rural population distribution. A study was made in this paper of the different agricultural factors which appear to be of importance for an understanding of the variations which exist in the distribution of population in general. The degree of association and the rati-

onale for that close spatial association between land and population distribution are related to differences in farming activities which result from different combinations of physical, cultural and biological factors. It is not to be assumed, however, that these factors have the same effects on the agricultural economy in all sections of the country.

There is a fair correspondence between the areas affected by flood water and crop divesification and high rural population density. Areas annually enriched by silt deposits brought down by the river floods, as in the "Core Areas", have diversified cropping systems, and normally allow double and multiple cropping. The intensity of farming, however, not only depends upon the quality of the flood water alone, but also upon (1) the frequency of flooding and effectiveness of drainage, and (2) the amount of silt deposited by flooding. For non-paddy crops flood waters of the Ganges and the Jamuina are more important than the clear water of the Meghna which is only suitable for paddy cultivation, as the paddy cultivation is not directly dependent upon flood water alone; the moisture holding capacity of the paddy soil is the determining factor.

It is not the soils but rainfall which influences to a great extent the farming systems. Areas where rainfall alone dictates the farming systems generally have lower cropping intensities and lower rural population densities and are characterized by near mono-culture of aman with the exception of the Comille surface. There is also a fair correspondence between the early rainfall and late flooding and rural population density. Early rainfall affords cultivation of jute or aus before aman is cultivated during the monsoon season, and the late flood extends the growing season after aman harvest so that it is possible to grow another crop during the rabi season.

Rural population density seems to be associated with the types of paddy that are cultivated in various parts of Bangladesh. Predominantly aus or boro growing areas have lower population densities in general than the aman growing areas, except where nothing but aman can be grown as in the cases of saline delta and in the pleistocene areas. In general, the highest rural densities occur in places where there exists a crop combination of aman-aus- jute- rabi crops signifying the fact that there is a distinct geographical relationship as to the degree of diversification of crops, crop-combinations, and the distribution of population in Bangladesh.

This study points out where immediate attention is required in order to improve any present disequilibrium btween man and land in Bangladesh. This will

involve the consideration of possible changes in kinds and intensity of land use. Further undertaking is needed as to the context within which floods occur, and the cultural and life of the villages

With regard to flooding in general, continued and further study of the relations between the hydrologic events and the human use systems as a measure of improving the effectiveness of development and protection programmes. As evident, environmental problems merge imperceptively into development problems and a working knowledge of the environment is vital for a proper planning of development. Development will necessarily involve wise use of the environment. Any adjustment thought to be suitable for protection against the environmental hazard in Bangladesh has to be viewed with caution considering the socio-economic and cultural attributes of the people. Further, any particular adjustment to be included in the final plan ought to be within the technological capability of the society.

A radically different pattern of resource use is necessary in order to realize the agricultural potentials of the country. Major policy changes will have to be made, not only in the use of agricultural land, but also in the development of water resources as well. Finally, any benefits which result from attempted remedies may be useless until there are corresponding developments in communication and in facilities for the marketing and storage of produce. Other things being equal, if the peasants purchasing power is offset by the relative increase in population in future, there is little hope that there will be a brighter future for a more self sufficient agriculture in Bangladesh.

Table 1

LAND UTILIZATION IN BANGLADESH

(1975 - 76)

Land Use Category	Area ('000' acres)	Percentage
Cultivated area	20,968	59.45
Current fallow[a]	1,591	4.50
Culturable waste[b]	662	1.87
Not available for cultivation	6,622	18.76
Forest	5,438	15.42
Total area	25,281	100.00
Single Cropped area	12,250	58.42
Double cropped area	7,269	34.67
Triple cropped area	1,449	6.91
Net cropped area	20,968	100.00
Total cropped area[c]	31,135	-

Notes : a. Current fallow is the area already brought under cultivation, but not cultivated during the year.

b. Culturable waste is the area suitable for cultivation but lying fallow for more than one year.

c. The sum of the net cropped area and the area sown more than once.

Source : Government of Bangladesh Bureau of Statistics, Statistical pocket Book of Bangladesh, Dacca, 1978, Table 4.2, pp. 114-115.

TABLE 2

CROPPING INTENSITY AND DENSITY OF RURAL POPULATION/ SQ. MILE BY DISTRICTS [a] (1975 - 76)

Cropping[b] Intensity	Rank	District	Density of[c] rural population	Rank	District
178	1	Rangpur	2150	1	Comilla
167	2	Tangail	1861	2	Dacca
161	3	Mymensingh	1557	3	Noakhali
158	4	Comilla	1504	4	Tangail
154	5	Noakhali	1477	5	Faridpur
154	6	Pabna	1431	6	Bogra
153	7	Bogra	1411	7	Mymensingh
153	8	Faridpur	1400	8	Rangpur
147	9	Chittagong	1364	9	Pabna
146	10	Dacca	1352	10	Bakerganj
146	11	Bakarganj	1287	11	Kushtia
142	12	Dinajpur	1224	12	Chittagong
136	13	Syhet	1218	13	Jessore
133	14	Jessore	1100	14	Rajshahi
128	15	Kushtia	967	15	Sylhet
123	16	Khuina	942	16	Dinajpur
120	17	Pajshahi	873	17	Patuakhali
114	18	Patuakhali	656	18	Khulna

a. Owing to data Limitations Chittagong Hill Tract district has been omitted in this study.

b. Intensity of Croping $\frac{\text{Area cropped} \times 100}{\text{Area sown.}}$

c. Census of population 1974

Rank order Correlation between the Intensity of Cropping and the Density of Rural Population per Square mile by districts

0.763

Source : (a) Government of Bangladesh, Bangladesh Bureau of Statistics Statistical Pocked Book of Bangladesh, Dacca, 1978, Table 4.3, p. 117.

(b) Government of Bangladesh, Bangladesh Population Census 1964, Bulletin 2, 1975 Table 3, pp. 54-95.

FOOTNOTES

1 . Government of Bangladesh, Bangladesh Bureau of Statistics, Statistical Year Book of Bangladesh, 1975, Dacca, November 1976, P. 29.

2 . Ibid. , P. 20.

3 . Government of Pakistan, Census of Pakistan 1951, Vol. 3. Table 3; Census of Pakistan 1961, Bulletin No. 2, Table 1, P. 24; Government of Bangladesh, Statistical Year Book of Bangladesh, 1965, Table 1.1, P. 16 and Table 1.4, P. 18.

4 . population projection from 1975 - 1985 has been based on declining fertility and declinig mortality.

5 . Government of Bangladesh, Bangladesh Bureau of Statistics, Statistical Pocket Book of Bangladesh, Dacca, 1978. Table 4.2., pp. 114 - 115.

6 . Statistical Year Book of Bangladesh 1975,Op. Cit., P. 93; Statistical Pocket Book of Bangladesh 1978, Ibid, Table 4.2, P. 114.

7 . Statistical Year Book of Bangladesh 1975, Op. Cit., P.93; Statistical Pocket Book of Bangladesh, 1978, Ibid; Table.

8 . Statistical Pocket Book of Bangladesh, Ibid; Table 4.18 P. 140.

9 . Government of Bangladesh, Bangladesh Bureau of Statistics, Monthly Statistical Bulletin of Bangladesh, Dacca October, 1977, P 31.

10. Statistical Pocket Book of Bangladesh, Op. Cit., Table 4. 18, P. 140.

11. Ibid., Table 4.18, P. 141.

12. J.P. Morgan and W.G. Mc Intire, "Quaternary Geology of the Bengal Basin, East Pakistan and India," Bull. of the Geol. Soc. of America, Vol. 70 (1959), P. 323.

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AN ATTEMPT TO LOCATE AN INDUSTRIAL PLANT IN AN ISLAMIC COUNTRY A CASE FORM THE SUDAN

BY

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INTRODUCTION

It is well known, that the present development approaches in many of our Islamic countries are static- a heritage and a continuation of colonial policies. Major success can only be achieved by a structural transformation. Development of basic industries in countries possessing enough resources is regarded as a step towards achieving this objective. Taking the Sudan as an example, this paper is mainly concerned with the economic geographic aspect of the erection of such industries, especially iron and steel industries.

It is axiomatic that steel is the base of today's technical development and represents the basis of industrialization of any country. A nation's steel campacity represents, therefore, a good criterion for the comparison of the degree of industrial development among the developed countries on the one hand and between them and the developing countries on the other. Without steel and other metallic products the modern civilization and especially the present modern technology is unconceivable, only through steel a country can aspire to be a heavy weight power. It is of great advantage, therefore, for these developing countries which possess enough ores to accomplish their own metallic industry.

The average annual consumption of steel in the Sudan amounts to about 120,000 tons (about 7 kg. per head of population.)[1] In the present and future development a rapid increase in consumption is expected, a matter which will lead to an increase of 300% by the end of the sixth year plan (1983/84)[2]. Many new development projects with relatively high steel requirements are under construcion in North Sudan as well as in the Southern Region. The home reserves of iron can easily be utilized to meet this demand. The importance of creating such an industry results from the everincreasing world prices of steel at an annual rate of 10-12%[3].

By home production not only the inland market has to be considered, but also the export to other Islamic- and neighbouring countries. For this purpose an exact analysis of the demand and market situation in these countries have to be

(1) United Nations Statistical Year book (1975), New York 1976.
(2) Unprinted official estimation of the Sudanese Mining Corporation.
(3) Estimation of the Arab Union of Iron- and steel industries 1973.

well studied in advance. Anyhow the Arab Countries alone produce together about 3 mill. tons of pig iron and steel and they consume about 17 mill.tons annually. The increase in annual consumption is estimated at about 10%. [1] Egypt, Algiers and Iraq give good examples of a successful iron and steel industry in the Arab Region.

The capacity of the plant must be planned according to the future increase in demand considering all the political, social and economic factors governing this demand. In this type of industry, the international and regional cooperation represents a necessity so that the produced quantity can well be increased followed by a profitable specialization with an appropriate export and import movement.

There are various methods for the production of pig iron depending upon demand, degree of concentration of metal in ore, available energy resources.... and many other economic and technical factors. But the most important common method is the reduction in a blast furnace. To be profitable the blast furnace must at least produce 800-1000 tons daily. If the demand is smaller, then a blast furnace will be uncommercial and another technique is preferred. Beside its great capacity the blast furance is very expensive. A new blast furnace complex with supporting coke oven costs up to 70 Mill. dollars.

Regarding the higher share of coke in the reduction process, blast furnaces are usually erected in regions with available high quality coal. The cost of transporting coke can there-by have a great influence upon processing costs[3].

Considering the small local demand for iron and steel in the developing countries and the critical financial situation of those countries such a device-blast furnace- can only be realized with great difficulty. For these countries another method offers itself: namely the electric furnace. The electric furnace is especially advantageous for these countries where there is not enough coke and which possess sufficient and cheap electric energy. Although the costs of smelt-

(1) Ibid
(2) An old estimation see JANCKOWITZ, S: "Wirtschaftsgeologie der Erze", Springer- Verlag, Wien- New York 1976, p.103-10.
(3) Ibid.

ing per unit of metal is higher than furnace, this device has the following advantages:[1].

(1) This process requires only about half the coke needed in the blast furnace, since electricity replaces coke used for heating purposes.
(2) Instead of coke as a reduction agent, semi coke or dried lignite can be used. Both are much cheaper than coke.
(3) The capacity of the plant is smaller than blast furnace.
(4) Smaller units can easily be erected, which in time and according to need can be enlarged.
(5) A complex of different iron ores can be used.
(6) In the case of Sudan the great timber resources can be used as a reduction agent, although the writer is in favour of importing semi- coke rather than destroying the local timber potential.

Iron ore deposits are reported to occur in many parts of the Sudan, the most important of which are those of the Red Sea Hills and Southern Kordofan deposits. Conditions for the extraction and treatment of the ores of the Red Sea Hills are generally better than those of inland areas. The location near the coast, the nearness to port- Sudan Sudan's main port- render cheap transport costs of coke from foreign countries. The Sudan itself possesses no coal reserves at prescent, although some coal has been discovered in a number of wells dug for water in the Nubian Series in Merowe- Dongola area[2]

One disadvantage of the Red Sea Hills area is the shortage of water. The metallurgic industry requires annually quantities of water to circulate round the furnace so as to prevent it from melting, usually 10 tons of water for every 2 tons of iron ore[3]. Therefore an accurate study as regards the water potential of the area and the economy of desalinization of seawater needs to be carrid out before any attempt to start such a project.

The Southern Kordofan deposits, important of which is the iron ore of Abu Tulu (a hill of 1000 meters long and 80 meters high) are characterized by a high metal content 61-70%. Total reserves are estimated to be about 35 million tons. Economially it is unadvisable that such rich ores be exproted. Furthermore the location of the deposits- 1500 km away from the port-makes its exploitation for

(1) Ibid
(2) For further information see: Mahmoud Ahmed A/Alla: "Minerals and Industry" In.: Proceedings of the Erkowit Conference 1966 on Industry.
(3) Riley. R. C. :- Industrial Gcography, Chatto and Windus, London 1973 P. 86.

export uneconomical. Neither can the Mechanical concentration enrich the ore to the extent of making its export as an ore economical.[1]

It is therefore necessary to process these ores locally, The economic feasibility of utilising these deposits in the production of iron and steel in the Sudan has already been demonstrated by a Sudanese expert and need not be further discussed here[2].

What is more important to deal with here is to find the optimal location for the processing of these ores. Such a location must be in a good relationship to the transport costs. To find this location I will try to use a simple mathematical model.

INTRODUCRORY EXPLANATIONS AND INITIAL LIMITATIONS TO THE MODEL

1. An important assumption is the use of an electric furnace, the advantages of which to the developing countries have already been introduced. For such a device the following amounts are needed[3].

	per ton / pig iron	per 100 ton / pig iron
Semi coke	0,45	45
Iron ore	1.67	167
Lime	0.38	38

Coke must be imported through Port Sudan. Electric energy can be supplied from Roseires power Station or a thermal of 30 MW potential can be erected, which will guarantee sufficient power for the plant[3].

2. The available transport network is binding. The location can be anywhere between port Sudan and El Fula (nearest railway station to the iron ore fields). The regions between port Sudan- Atbara, and El Fula- Kosti have been excluded owing to serious defficiency in water resources.

(1) M.A. A/Alla : Ibid,

(2) See El Agib A.R. : "prospects of Utilizing Sudanese Iron Ores", paper presented to Erkowit Conference on Industry 1966.

(3) Calculated after Jankowich on the base of Sudanese ores.

(4) El Agib, A.R. : - Abid.

Thus we are only left with the area between Atbara and Kosti, where there is sufficient water supply from the Nile and its tributaries. This region possesses also relatively better transport facilities. The white Nile is navigable between Kosti and Khartoum. The main Nile can as well be navigable between Khartoum and Atbara after the eradication of the 6 th cataract. For a long period such a plan was projected by the Ministry of Transport.

3. In kosti-Atbara area the following places can be taken into consideration: Kosti, El kawa, El Dueim, El Gitaina, Khartoum, El Gaili, Shendi and Atbara. They represent central places with different hierarchical positions. All of them possess some degree of infrastructural institutions, although they are different in intensity, and represent places of population concentrations throughout the region which is in turn important for labour supply.

4. For simplification we can leave the transport costs of coke to Atbara and the ores to Kosti. The costs can be added to the total costs later on.
5. The most important areas for the consumption of pig iron and steel are Khartoum and Atbara. Khartoum is the main centre of concentration of industrial plants for the further processing of imported steel and its use in constructional purposes. Atbara, on the other hand, represents, the centre of the Sudan Railways repair workshops. The writer esimates the consumption of Khartoum at 60% and Atbara at 40%.

6. Lime for metallurgical industry is found in the Sudan in many places. (See fig. (1)). For our model only the lime deposits near Atbara and near Kosti (at Rabak) can be taken into consideration. Both deposits are now being used for cement productions.

One of the Sudanese geologists assumes that the lime deposits near Kosti are unsuitable for the processing of iron ore[1]. The auther didn't find any further support for this assumption in the literature. In order not to put this into account we are going to deal with two cases in the model:

Case (a) : Under the assumption that the lime deposits near Kosti are not useable. Therefore they must be brought from Atbara area.

Case (b) : Based upon the use of the deposits in Kosti area.

(1) Omar, A.M. : - "Minerals and Mining Industry in the Sudan"Paper presented to the Conference on "Man and Environment" Khartoum, 1972.

7. Edel metals for steel production and especially manganese ores are found in three different areas east of the axis Kosti-Atabra under consideration (Fig.1). For this reason and for the fact that only relatively little amounts of these metals are added to pig iron in steel production, their transport costs would not play an important role in the decision of the plant location. Therefore they can be left out of the model.
8. For simplicity and to avoid any contradiction concerning the cost of a ton/km by boat and train let this cost equal one unit. By exact information this unit can be translated into actual expenditure.

After considering the above- mentioned explanations Fig.2 (a) and its simplification 2 (b) can be studied. The problem can be mathematically formulated as follows:-

THE PROBLEM

From the eight points on the axis a-b the optimal location must be found according to transport costs. Thereby 2 cases have to be studied:

Case (a) : The use of lime deposits near Atbara only.

(b) : The use of lime deposits near Atbara and/or Kosti.

SOLUTION

Case (a)

$$Y = k_1 x_1 + k_2 x_2 + k_3 x_2 + k_5 x_2 + k_4 x_3 + t_1 + t_2$$

(x_1 ' x_2' x_3: distances in km as in fig. 3 "h").

k_1 : required amount of iron ore per 100 ton pig iron

k_2 : rcquired amount of semi coke per 100 ton pig iron

k_3 : required amount of iron lime coke 100 ton pig iron

k_4 : amount of pig iron transported to Kharoum

k_5 : amount of pig iron transported to Atbara

t_1 : transport cost of ores from El Fula to Kosti (to be added later on)

t_2 : transport cost of semi coke from port Sudan to Atbara (to be added later on)

$$Y = k_1 x_1 + (k_2 + k_3 + k_5) x_2 = k_4 x_3$$

$$= 170 x_1 + 123 x_2 - 60 x_3.$$

Case (b) :-

$$Y = k_1 x_1 + k_2 x_2 + k_3 x_1 + k_4 x_3 + k_5 x_2$$
$$= (k_1 + k_3) x_1 + (k_2 + k_5) x_2 + k_4 x_3$$
$$= 208\, x_1 + 85\, x_2 + 60\, x_3$$

To replace with each place taking Kosti as an example.

KOSTI:- (in unit per 100 ton / pig iron).

Case (a) : -

$$Y = 170\, x_1 + 123\, x_2\ 60\, x_3$$
$$Y = 170 \times 0 + 123 \times 541 + 60 \times 316$$
97 803

Case (b) : -

$$Y = 208\, x_1 + 85\, x_2 + 60\, x_3$$
$$= 208 \times 0 + 85 \times 641 + 60 \times 316$$
$$= 73\ \ 445$$

TRANSPORT COST OF THE INDIVIDUAL PLACES IN QUESTIONS:

(in units per 100 iron/ pig iron).

Location	CASE (a) Lime deposits near Kosti unuseable		CASE (b) Lime deposits Near Kosti useable.	
Kosti	97	803	73	445
El Kawa	96	841	78	107
El Dueim	96	347	80	501
El Gitaina	94	891	87	557
Khartoum	93	695	93	333
El Gaili	102	255	107	998
Shendi	112	099	124	809
Atbara	128	470	152	828

From the model and the above - mentioned limitation it is clear that in case (a) Khartoum and in case (b) Kosti are the suitable locations. The comparison between the two cases shows that the total transport costs of a ton pig iron for (734,5 units) are less than these of Khartoum (937 units).

The optimal location Kosti [i] lies about 300 km's south of Khartoum on the western bank of the White Nile. Due to the erection of the Kosi- Rabak bridge and hence the construction of the railway line (about 1913) Kosti developed from a very small settlement of Shilluk population. Unlike most of the European cities which developed due to concentration of industrial activity and labour force Kosti evolved as a trade centre for agricultural products. This same central function in addition to its accessibility enhanced the growth of the town in its later phases af development.

Through river transport, Kosti is today a very important link between north Sudan and the Southern Region. In fact Kosti port is the most important river port in the whole country. Beside river transport and railway line Kosti is connected with many all-weather and seasonal roads to most parts of the country.

The town lies in the centre of an agricultural region. North and south of the town many pump schemes have been established along the White Nile after the erection of Jebel Aulia Dam (1936), which in turn stimulated the commercial activities of the town and attracted considerable numbers of labour force.

The first stages of modern industrial development started during the fifth decade of this century by the construction of a meat factory and an oil pressing factory (1954-55). Due to the increase in cotton production two ginning factories were established in 1958. With the growth of the town many new types of industries and repair shops were introduced.

Up to 1974 industry was occupying the area north of the commercial area (See fig. 3). For certain considerations, administrative, security as well as environmental, the town administration in the later sixties thought of removing the industrial area. The new area was established by 1975 in the south eastern part of the town (fig. 3). The northern part consists mainly of small factories,

(i) The town has been named after a Greek Merchant (Kosti) who is said to have been the first to establish a shop in the area.

repair shops, black- smith shops and spare parts stores. In this part there are about 137 plots of land ranging between 175-500 m^2 in area. The southern part, which is locally known as heavy industrial area, consists of 29 plots ranging between 2000-260000 m^2 in area. It has been newly planned and is mainly accupied by oil mills, ginning and soap factories as well as a tannery and textile factory.

Enough land is available for the future industrial development and for the growth of the town as a whole. Because of the obstacles of the Qoz and sand dunes in the west and the white Nile in the east, this growth can take a north-south direction. Especially for industry, its future growth may take a south-eastern direction which coincides with the present trend. This direction also keeps most of the town away from any environmental constraints which industrial development may cause in the future.

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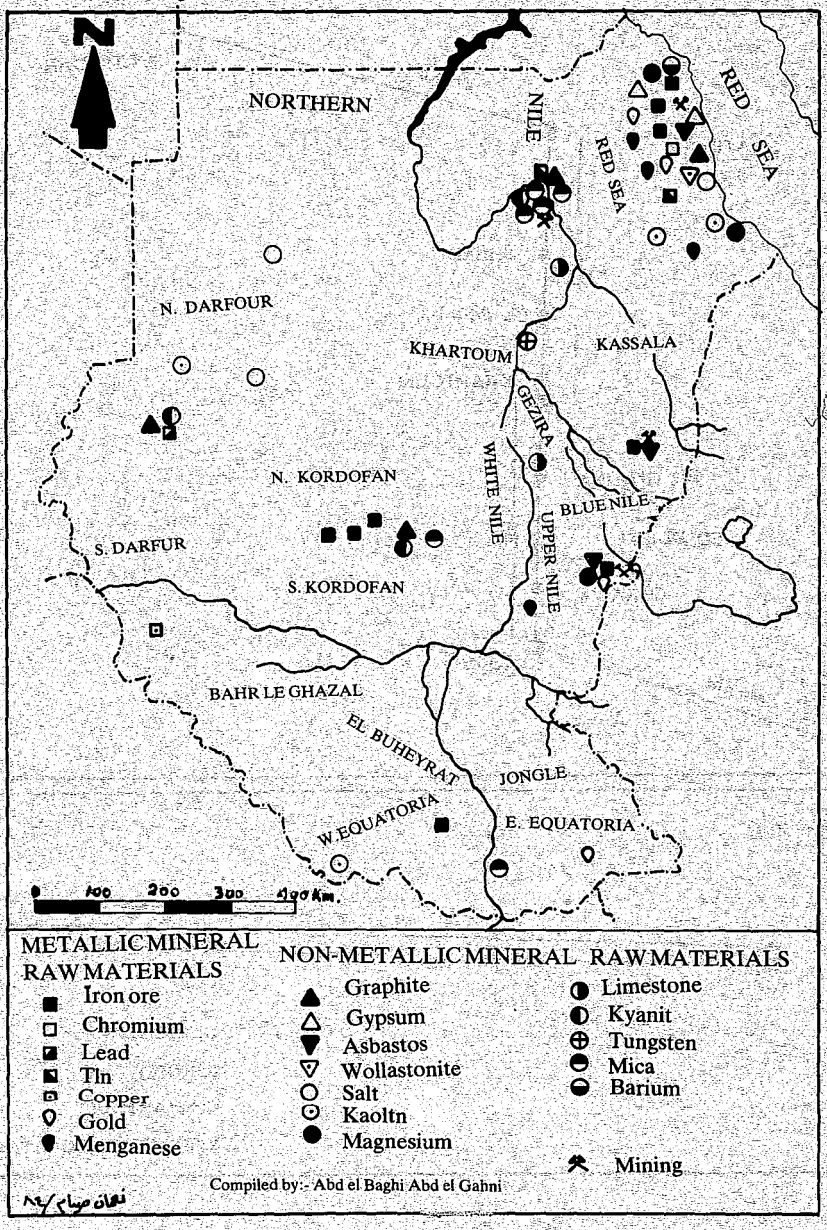
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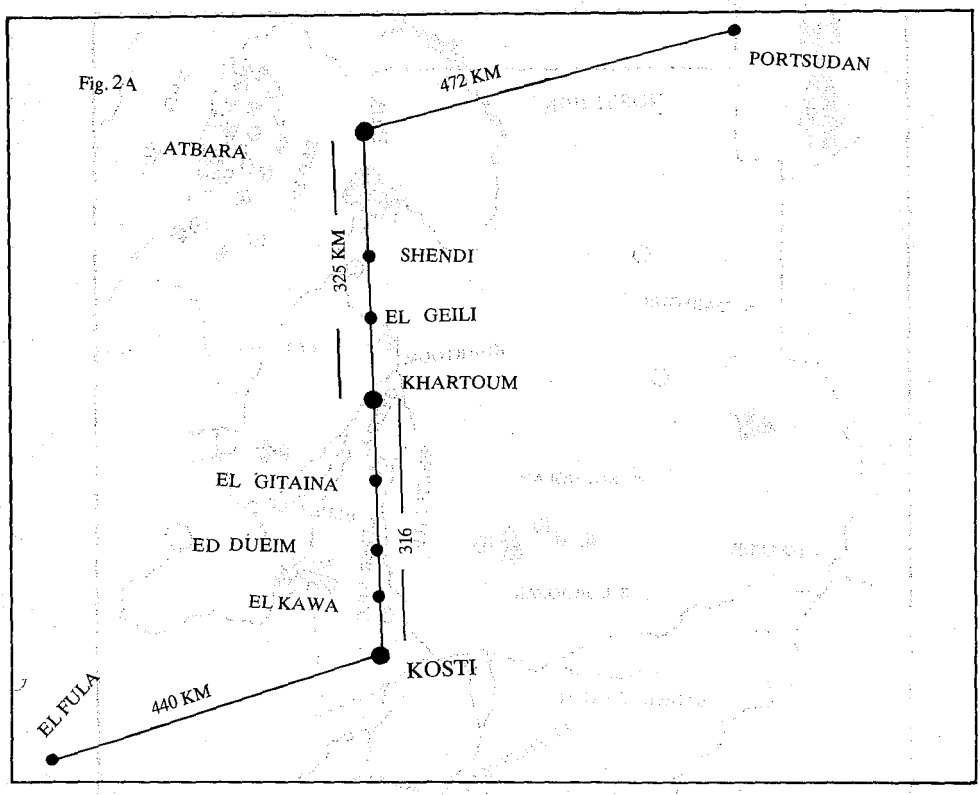
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Fig. 1- SUDAN Mineral Resources




Fig. 2A
PORTSUDAN
472 KM
ATBARA
325 KM
SHENDI
EL GEILI
KHARTOUM
EL GITAINA
ED DUEIM
316
EL KAWA
KOSTI
EL FULA
440 KM

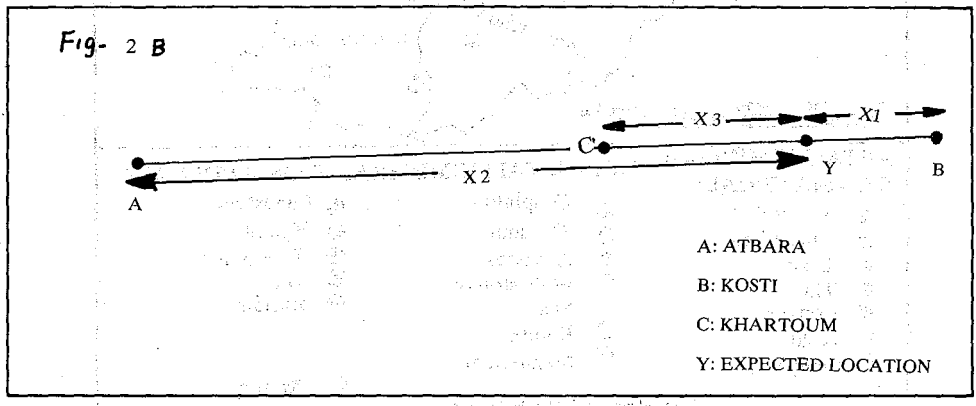
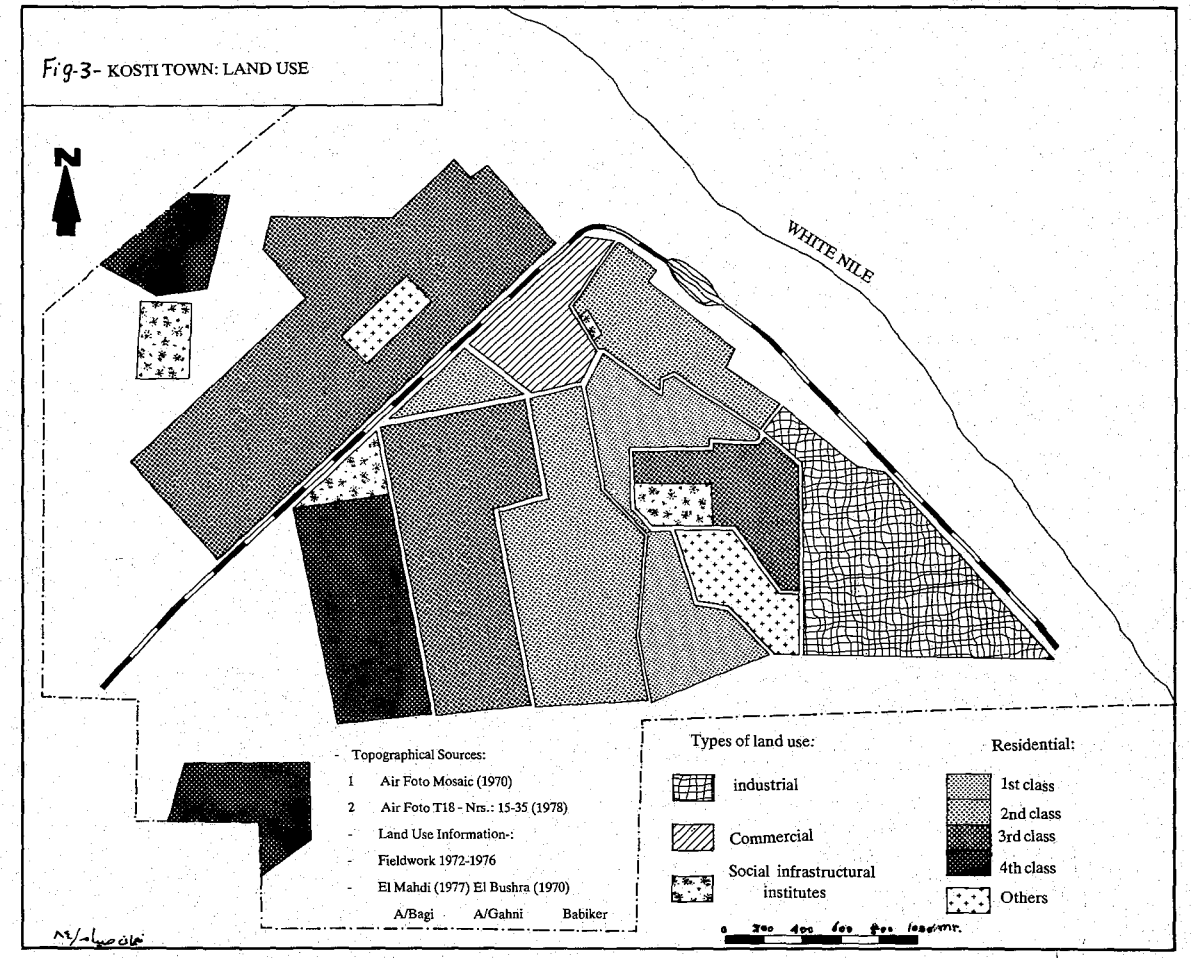

Fig- 2 B
X3
X1
C
X2
Y
B
A
A: ATBARA
B: KOSTI
C: KHARTOUM
Y: EXPECTED LOCATION

Fig-3- KOSTI TOWN: LAND USE





AGRICULTURAL GEOGRAPHY OF AFGHANISTAN

BY

GHULAM J. AREZ

INTRODUCTION

The agricultural geography of Afghanistan can be studied in relation with the climate, topography, soil, water budget, social heritage, and general policy of government for the welfare of the whole nation, thus, there are two main factors, which directly control the pattern of agriculture throughout the counutry:

1- Physical aspects such as: climate, topography, soil, and hydrology.
2- Cultural aspects that include: social and traditional aspects, consumer needs, migration from rural areas to cities, assistance and guidance of farm technology and mechanization in agriculture. As a result, the pattern of agriculture is the product of these above mentioned phenonena in Afghanistan.

As a whole the development of agriculture is one of the most important targets of the Democratic Republic Government of Afghanistan. Despite the urgent need for exports of agricultural products to meed capital goods and other important requirements, and a domeestic supply to provide enough eaw materials for industrial and food for industeial workers, progress in this sector of the economy obviously takes time and continuous effort.

AGRICULTURE IN CONNECTION WITH THE PHYSICAL ASPECTS

A. Topography

The Hindukush range, which extends from north east to the south west, is connected on the east with the Himalayas and on the west with the Elburz of Iran, accupying one-third of the total area of Afghanistan. The Hindukush range as a back bone of the country stretches from east-north east to west-south west and divides the country into north and south sections with many valleys on the north and south slopes.

The Hindukush is 600 Kilometers long and the highest peak of it is Noshaq with an elevation of 7485 meters. The Hondukush is 100 kilometers wide in the north east and 25 kilometers wide near Khawak pass, and the average elevation is approximately 5000 meters in the northeast,decreasing from 4000 to 1000 meters in the south west ending with hot, sandy area of Nimrez and Chakhanour, Therefore, the Hindukush range is an important source of running water,

snow, and glacier. Present glacial action in more than 70 places of Badakshan and the Wakhan mountains. There are also perennial snowfields in Badakhshan down to elevations of approximately 4000 meters. The hydrology of the whole counrty controlled by the Hindukush range. The Amu Basin on the north, the Kabul Basin in the east, the Harirud to the north west, and the Hilmand Basin on the south west are most important regions with different physical and agricultural aspects.

Almost 95 percent of the surface area of Afghanistan is covered by mountains, hills, sandy plains, and dunes, only 5 percent is cultivated area, which is located on the north and south the Hindukush slopes, and in plains and valleys along the major river banks. The northern plain is wider than other plains and stertches approximately 370 kms. east to west and extenda 70 kms from north to south in the Amu Basi.Along the Amu River and the northern plain there is a sandy area parallel to the aAmu, which is a significant pasture during the spring season for sheep and Karakul. Another important plain is located to the south west portion of the country, surrounded by Kandanhar, Dil-Aram, and Hamune Helmand. However, this area is sparsely populated but pastures provide animal husbandary, while cultivation is restricted to the immediate river boarder. Dry faeming is prming id other places. Kabul valley provides agricultural activity in the vicinty of river banks, but this area is densely populated, and most of the people are non-agrarians, because they are working in indus tries and governmental offices too. Anyway, mountains have a mountains have a major on the agricultural life Afghanistan.

b. Climate

Next to landforms, climate exerts a dominant effect on agricultural pattern, therefore, the general structure of agriculture is a product of the complex of climatic factors. Temperature, precipitation, air masses and pressure centers are significant elements, which determine the quality of climate, and jointly affect the pattern of agricaltural products. That is why, in a geographical environment, climatic conditions control agricultural aspects. On the other hand agricultural pattern and vegetational cover are determined by climatic regions all over the world. This fact can be seen in Afghanistan, both in vertical and spacial dimensions throughout the country. In the vertical dimensions we can find certain life zones in the Hindukush range, horizontal characteristics of agriculture can be found in plains and valleys. Both, in vertical and horizontal dimensions, there are different types of agricultural products delimited by temperature and

elevation, The pattern of temperature distribution, rainfall, and air masses can be studied in Fig 1.

Temperature range shows a semi desertic characteristics, varying from season to season and amplitude is also high enough in each meteoroligical station.

Monsoon air masses affect the South, and South East portions of the country in Summer, while the Siberian cold fronts bring snow in the winter time. The Caspian air masses bring rainfalls in spring.

The amount of rainfall is not enough throughout the year. The average amount of rainfall does not exceed 25 cm. Drought is another big problem with a possible cyclic movement of 5 years.

Recession and retreat of glaciers on the mountains of Badakhshan affect each year the water budget, which must not be ignored in our agricultural economics.

Climatic regions

On the basis of meteorological data the climatic zonation of Afghanistan can be divided as follows:

1. Desert climate of South West (BWB).
2. Monsoon climate of Paktia (South East) (CW).
3. Mediterranean climate of Nengarhar along the lower portion of the Kabul Basin.
4. Steppe climate of the North and South slopes of the Hindukush range (Bsh).
5. Alpine Tundra of the central plateau (Df).
6. High land climate of the North East Hindukush (H.& DF). Fig 2.

The desert climate of Afghanistan indicates extremely low precipitation and high temperature range, Evaporation is also extremely high, being almost 15 times higher than total precipitaion. Dust bowls are abundant. Because of these environmental obstacles agricultural activies are limited. The only suitable areas for cultivation can be found along the river banks. Due to the lower amount of humidity most part of this climatic zone is covered by dunes with small shrubs, but cactus is not growing in this area. Nimroze, Farah, and Hel-

mand are located in this climatic zone. Locally, there will be some exceptions as micro climatic units that the whole aspects of desert can not be found especially in upper regions of Helmand and hilly places of Farah.

The Monsoon climate of Paktia is affected by the Indian Ocean, therefore Indian Monsoon brings maritime rainfall in the Summer, while Siberian continental air masses bring rainfall during the spring season. The total annual amount of rainfall reaches 700 mm. Therefore, this area is covered with coniferous trees, and the main economic products of this climatic zone stands on forestry and wood, both for carpentary and fuel.

The Mediterranean climate of Nengarhar and Laghman provinces is characterized by a very dry and hot Summer, alternating with a wet and mild winter.

Mediterranean vegetation and evergreen forests can be found in this area. A very remarkable point was studied recently in this area, showing that due to the construction of the Darunta dam, the temperature of the whole area has decreased. If it continues in the same way, probably, the products of oranges will decrease, and olive will replace the citrus fruits.

The steppe climate of Afghanistan is stretched on to the slopes and foot-hills of the Hindukush ranges. Actually, this area looks like a semi circle, located on the north, west, south west and southern slopes of the mountainous parts of the country. Along the river beds and valleys one can find limited areas which are under cultivation, but the northern plains can be counted as a belt for agricultural purposes. Wheat and animal products of this area are the backbone of our national economy.

Alpine, tundra of the central plateau is important in regard to grazing for sheep and nomadic life in the summer season. The upper part of the Helmand, The Baba and The Navoor areas are very significant for animal husbandry.

Mountain climate in elevated parts of the country is very important in regard to water supply. Snow and glaciers are stored for irrigation. The Pamir, Wakhan, the Hindukush eastern and central ranges can be examined for this purpose, since the upper courses of all rivers are located in this area.

c - Hydrography

Water budget and the pattern of hydrography are another aspect fostering agricultural activities. It is felt that water is a national resource and wealth belonging to the nation, therefore, the water resources should be used to the benefit of the people. In this connection, preparation of a comprehensive water resources planning program is very important, Assessment of water availabili ties, projected water demands, and development of a long term strategy for water supply and better usage of it should be studied by experts.

Efforts also should be made in order to conserve and increase the efficiency of use of water by improvement of irriagation, development of ground water resources, and establishment of farm cooperatives.

Water has great impact on agricultural products in Afghanistan, and is one of the basic elements of our environment. Henceforth, a water development program should be elaborated in a way which improves the quality and quantity of agricutural products.

General Hydrographic basins of fresh water in Afghanistan are as follows.

Basin:		
I. The Amu Basin:	Catchment in Km^2	
Amu	90,000	
Balkhab and Andkhoi	68,000	234,000
Murghab	38,500	
Hari-Rud	39,300	
II. The Indus Rasin:		
Kabul	60,600	80,600
Kurm, Gomal	20,000	
III. Helmand Basin:		
Helmand	154,300	
Farah Rud	30,300	
Adraskan	22,000	340,000
Ghazni	16,080	
Others	117,320	
	Total	654,600 Km^2

Water balance of some important rivers:

Amu River	at Kerki	250 Cu m/Sec.
Kokcha Mouth	1965	5138 CCu m/Ses.
Kunduz	1967	1884 Cu m/Sec.
Murghab		
Hari Rud at obeh	1965	985 Cu m/Ses.
Helmand	1961	6087 Cu m/Sec.
	1962	2946 Cu m/Sed.
Kabul River	1962	35 Cu m/Sec.
1 st reach		
2 nd reach	1962	900 Cu m/Sec.
3 rd reach	1960	3000 Cu m/Sec.
Farah Rud		1500 Cu m/Sec.

Present conditions of the irrigation system, (areas in 1000 hactares).

	Normal	Shortage	Fallow
A. River: Amu Darya			
by river	402	240	517
by karyz	3	2	2
Spring	39	0	0
well	8		
B. Kabul Basin			
by river	376	60	17
karez	32	2	4
Spring	32	0	0
well	1	0	0
C. Helmand Basin (river)	260	23	318
Karez	44	6	73
spring	116	0	0
well	7	0	0

d - Soils in relation with agriculture

The structure of soil also reflects the climatic and environmental factors,

therefore, the pedocal soil is abundant throughout the country, but the amount of PH differs from place to place. The soils of the main farming areas within the rivers, valleys, and foothills can be divied as follows:

1. Heavy loam of the bottom lands.
2. Medium loam of mountain slopes (chero zems).
3. Loess- like loams of the foothill areas in the northern part of the country.
4. Cultivated dry- farming oasis soils.
5. Alluvial soils in the river bottom lands are also cherozems, but have more humus and are less stony.

The climatic relationship of soil and biotic aspects can be studied in the following chart:

Climate	Soils	Bioms
1. Monsoon $E/_P$ 1	Podzolic P^H 1	Montanic coniferous
2. Mediterranian $E/_P$ 1	Terra rossa P^H 7	evergreen & ,,
	and, loam chestnut	Sclerophyllous plants
3. Steppe $E/_P$ 1	Brown soils P^H 7	Herbeceous & Crops
(N&S)		
Savana		
along the Amu)	Chernozem ,,	Savana & deciduos
4. Semidesert $E/_P$ 1	Alkalin ,,	Tamarisk & Xerophytic
		stands
	Salive &	
	reddish desert	
	sand dunes	
5. Alpine meadow		
& Alpine Tundra $E/_P$ 1	Azonal &	Herbeceous,
	Permafrost	perennial plants
6. High mountains $E/_P$ 1	rocky soils	lichen & Mosses.

Fig. No. 2

AGRICULTURAL DISTRIBUTION

a. Verical zonation

On the basis of climatic regions, there are different agricultural products all over the country.

Mountains provide certain life zones as well, and thus horizontal and vertical distributions of cereals and other crops which are quite familiar to our farmers.

In accordance with the topography, the following life zones can be found in Afghanistan:

1.	Barley	up to	3400 m.
2.	Spring wheat	"	3300 m.
3.	Peas	"	3100 m.
4.	Winter wheat	5	2840 m.
5.	Carrot and turnip	"	2650 m.
6.	Millet	"	2610 m.
7.	Potato	"	2600 m.
8.	Corn	"	2580 m.
9.	Rice	"	2110 m.

The surface area which is cultivated in Afghanistan reaches 22,745,400 jeribs. This area is divided into irrigated and dry farming areas:

10.	Cotton	"	2105 m.
11.	Grapes	"	2100 m.
12.	Citrus	"	1070 m.
13.	Figgs	"	1050 m.
14.	Sugar cane	"	1040 m.
15.	Date palm	"	860 m.
16.	Bamboo	"	660 m.

The surface area which is cultivated in Afghanistan reaches 22,745,400 jeribs. This area is divided into irrigated and dry farming areas:

Dry Farming	10,819,270	Jeribs
Irrigated farming	11,926,130	"
Total	22,745,400	"
Agricultural population	10,839,870	
Number of villagers	15,270	

Land use in Jeribs:

1. Fallow	7,801,810	
2. Cultivated	22,745,400	
3. Forests	9,937,100	
4. Pastures	31,310,200	
Total	71,794,510	

b. Horizontal distribution

The Northern and Southern plains of the Hindukush range provide a vast surface area of cultivatedlalnd, the valleys and river banks are also significant in this regard. About 90% of the cultivated land is devoted for wheat, and the area of other crops is counted as follows.

1. Wheat	2,277,600	Hectares	1975
2. Barley	340,200	"	"
3. Cotton	138,000	"	"
4. Sugar cane	1,300	"	"
5. Sugar beets	4,500	"	"

PRODUCTION OF PRINCIPAL CROPS IN 1975

Total	4,320,000	Tons
Wheat	2,750,000	"
Corn	770,000	"
Rice	420,000	"
Barley	380,000	"
Cotton	145,000	"
Sugar beets	66,600	"
Sugar cane	51,600	"
Oil seeds	40,000	"
Vegetables	700,000	"
Fruits	865,000	"

As you find in the above columns, wheat production stands on the top of the list. Therefore, our agricultural economy in rural area is based on cultivated crops. Fig.3 .

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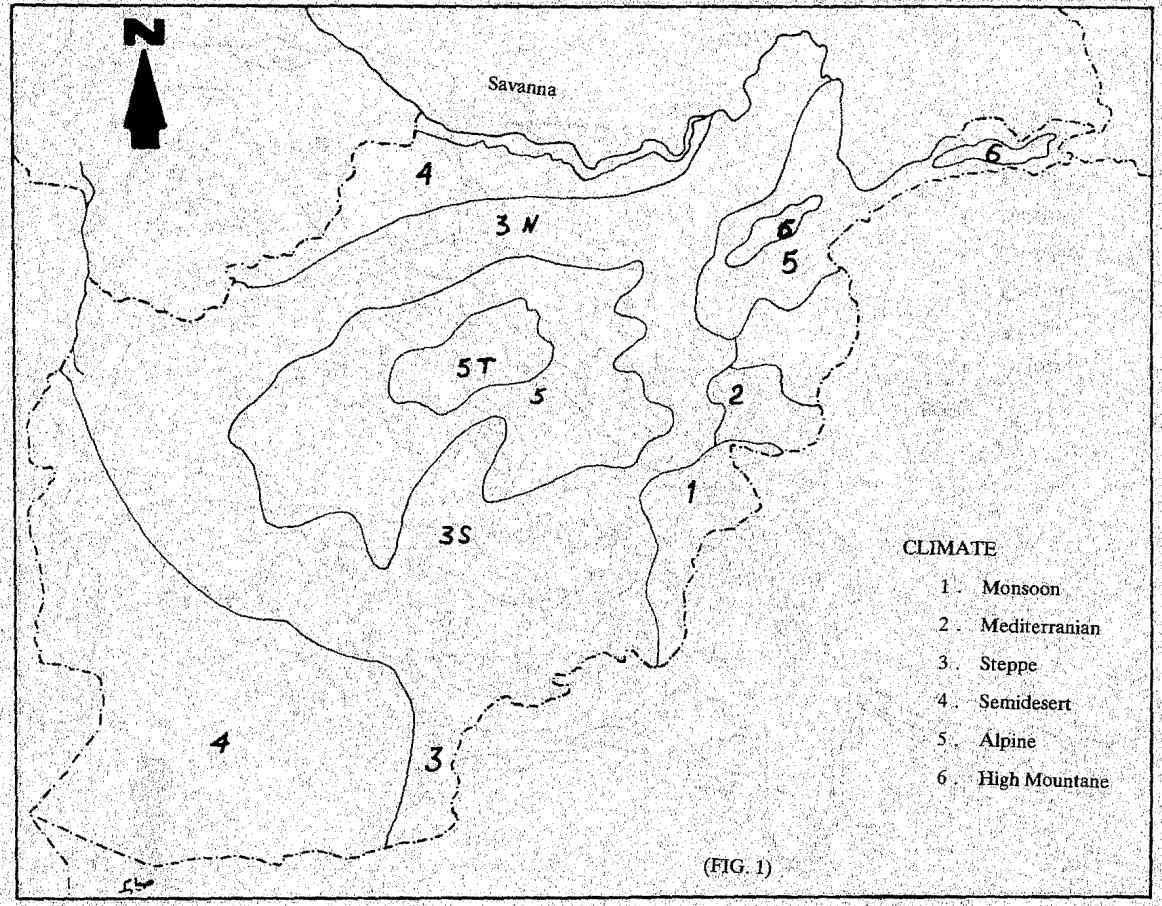
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N
Savanna
4
3 N
6
6
5
5T
5
2
1
3S
4
3
CLIMATE
1. Monsoon
2. Mediterranian
3. Steppe
4. Semidesert
5. Alpine
6. High Mountane

(FIG. 1)

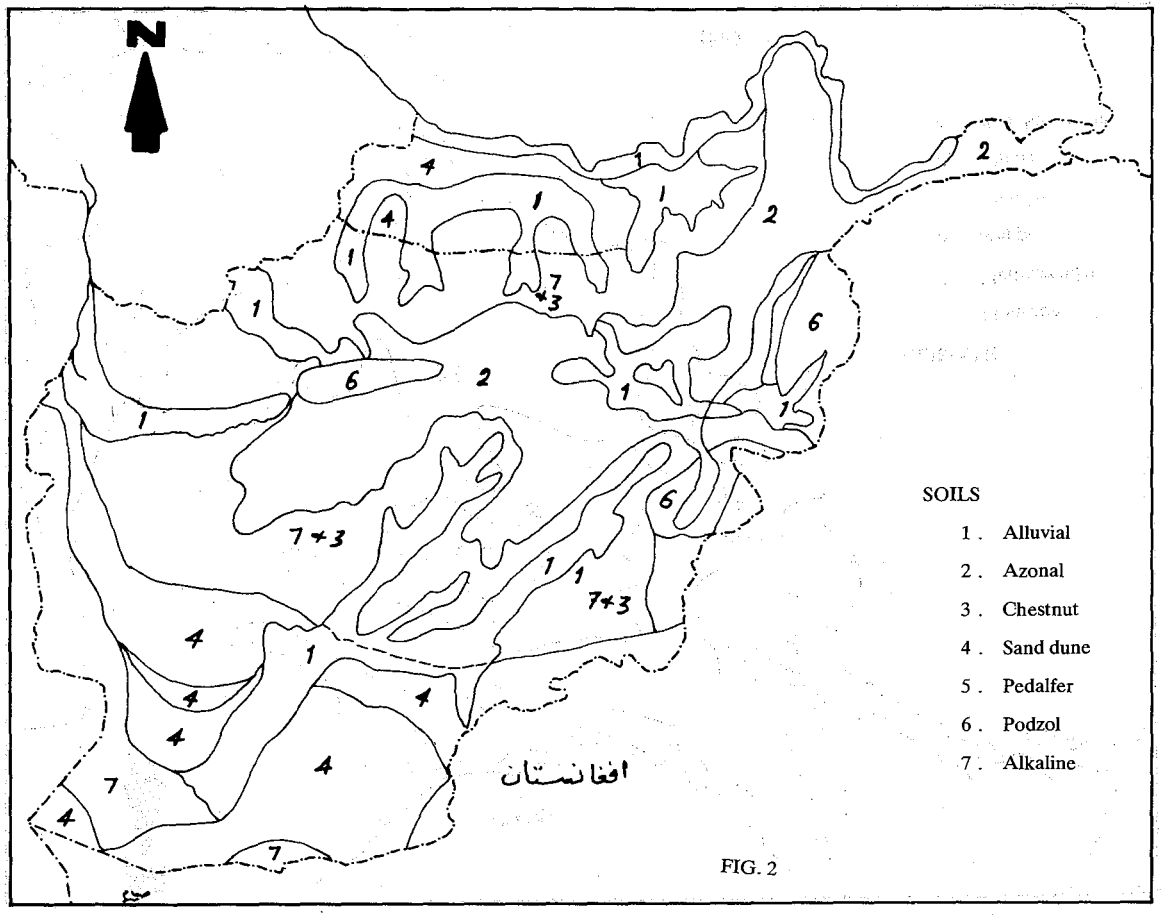

N
افغانستان
SOILS
1 . Alluvial
2 . Azonal
3 . Chestnut
4 . Sand dune
5 . Pedalfer
6 . Podzol
7 . Alkaline

FIG. 2

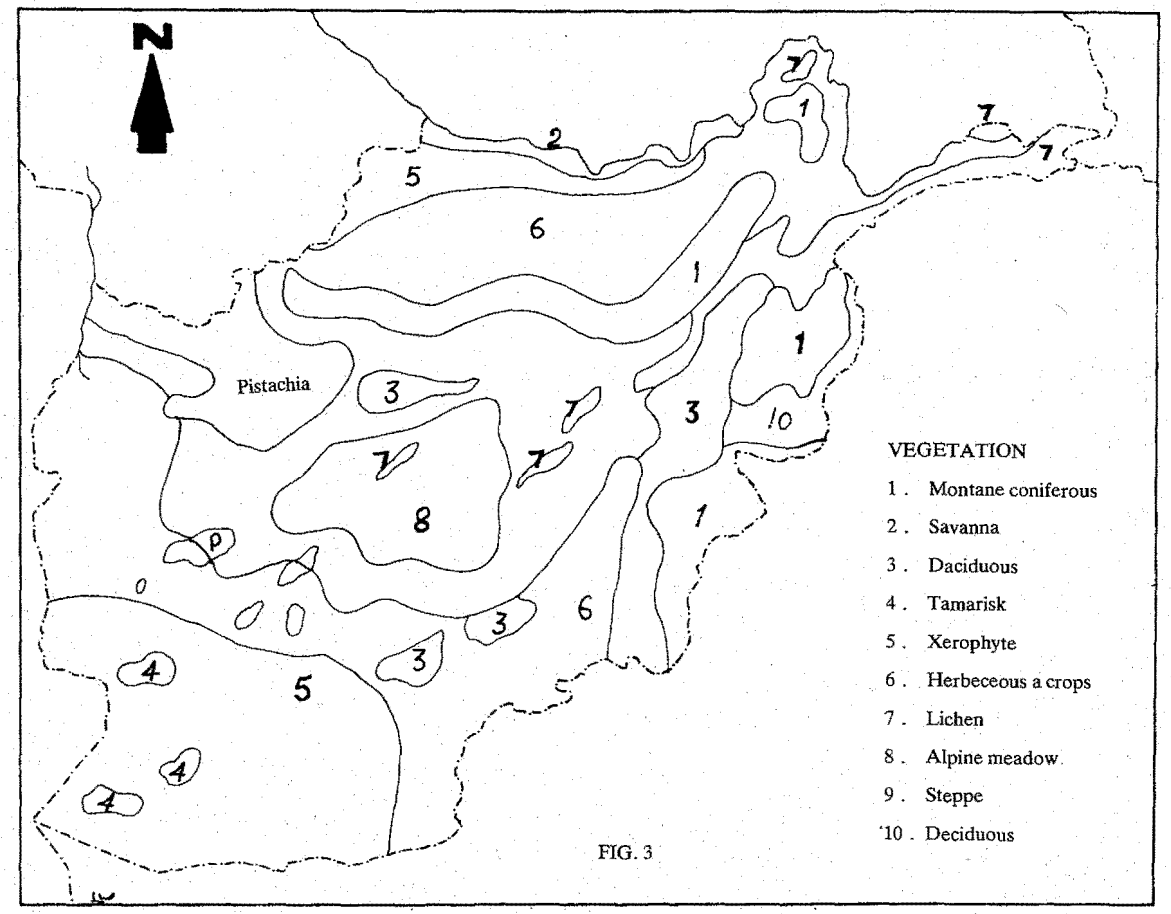
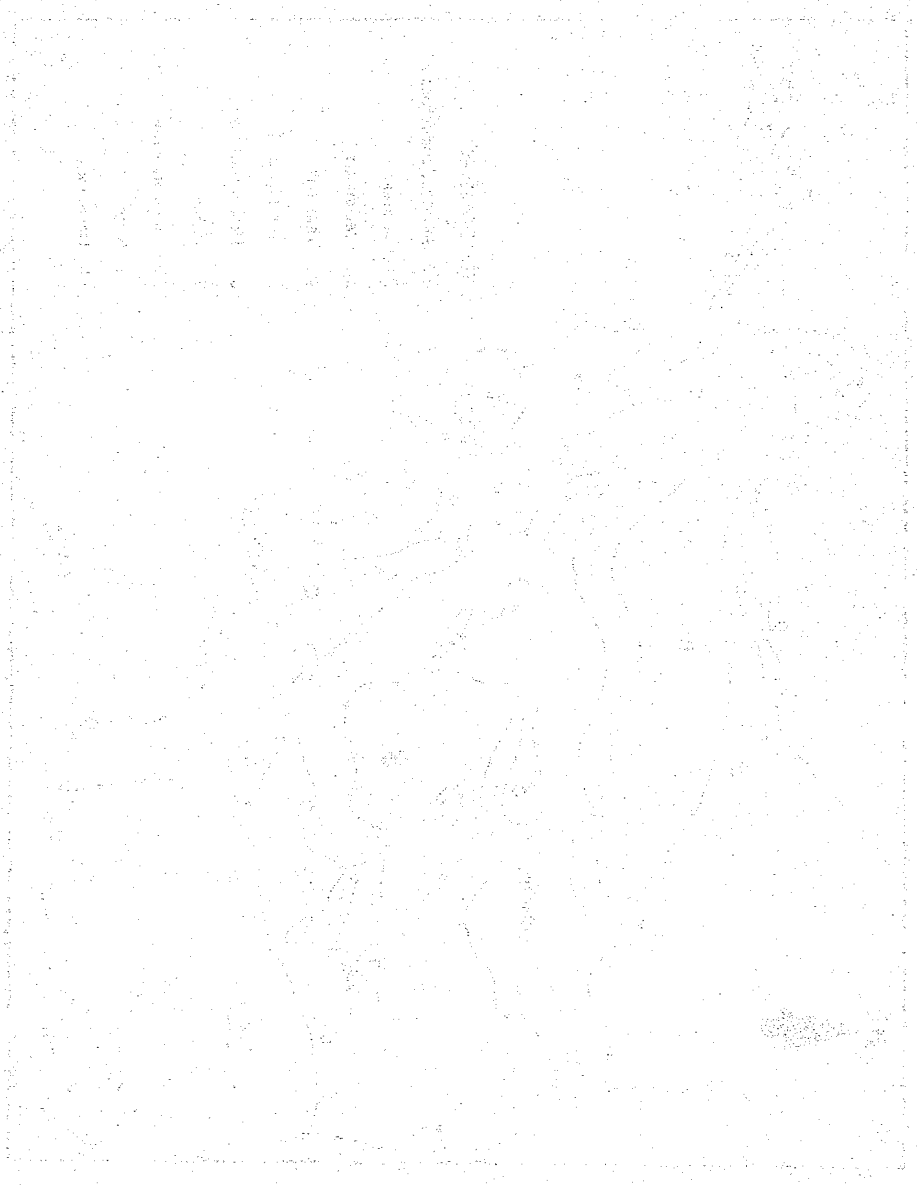

N
Pistachia
VEGETATION
1 . Montane coniferous
2 . Savanna
3 . Daciduous
4 . Tamarisk
5 . Xerophyte
6 . Herbeceous a crops
7 . Lichen
8 . Alpine meadow
9 . Steppe
10 . Deciduous

FIG. 3



AGRLCULTURE AND GRAZING IN THE ISLAMIC WORLD

BY

MOHAMMAD SHAFI

INTRODUCTION

The Islamic World comprises the countries where the population is predominantly muslim in Asia and Africa. These countries, almost all of them, except Indonesia stretch between the Equator and 42°N. The Islamic World, excluding the sizeable muslim population of India, China and the USSR comprises sixteen countries in Africa with a total area of about 14 million sq. kms, and a population of about 133 million. In Asia it includaes nineteen countries with population of about 417 million and an area of about 10 million sq. kms. Thus the Islamic World, including over 35 countries covers an area of 24 million sq.kms. and has population of about 550 million.

AGRICULTURE

The total cultivated area in the Islamic World is about 192 million hectares of which about 80 million hactares (42 percent) are dévoted to the producion of the following seven main cereals:

Wheat, rice, barley, maize, rye, oats and millets.

Regional distribution

a - in Africa

If the regional distribution of lands devoted to the cultivation of cereals is considered four countries in Muslim Africa, namely Egypt, Mauritania, Morocco and Guinea devote between 50 and percent of their available cultivated land to cereal crops, while three countries namely Algeria, Gambia and Tunisia devote between 30 and 40 percent of cultivated land to cereals. In the remaining countries, the percentage of land under cereals between 2 and 20 percent.

b - In Asia

In South and South-east Asia, the percentage of available land devoted to cereals is remarkably high. In Bangladesh, due to double and triple cropping, the percentage swells to 112, while in Malaysia it is 94 and in Indonesia 67. In South-West Asia, the percentage sharply declines and ranges between 40 and

46 percent in Afghanistan, Iran, Iraq and Syria but it comes down to 25 in Jordan, Lebanon and Yemen.In Saudi Arabia it is about 35 percent.

Individual crop (land occupancy)

However, if the area under individual cereal crops is considered, Turkey, Pakistan and Iran have the highest percentage of the area under wheat to the total cultivated area in the Islamic World. In the of case of rice,Bangladesh and Indonesia occupy the leading position (ranging between 36 and 47 percent) of the entire area under rice in the Islamic World.

In the case of Barley, Morocco, Iran and Syria have a percentage of land ranging between 13 and 28% of the total land given to barley cultivation in the Islamic World. Regarding maize,Indonesia has the highest percentage (45), followed by Pakistan, Turkey and Egypt. Syria takes a lead in rye while Turkey and Algeria lead in oats respectively.

Agricultural production

The production of the above mentioned seven cereal crops in the Islamic World amounts to 115 million metric tons. The pattern of production of the various crops varies sharply in the different countries of the Islamic World. In the case of wheat, Turkey ranks first (34 percent), followed by Pakistan (21 percent), Iran (11 percent) and Egypt (5 percent) of the total available land under wheat in the Islamic World.

In the case of rice production, Indonesia has a premier position (44 percent) followed by Bangladesh (33 percent) and Egypt (5 percent).

As regaeds the production of barley, Turkey enjoys the first position (35 percent) and is followed by Morocco (25 percent). Indonesia has a leading position in maize (31 percent), and is followed by Egypt and Turkey (28 percent and 12 percent respectively). In the case of rye and oats, Turkey enjoys the highest position, while in the production of millets Egypt leads the Islamic World (20 percent) and is closely followed by Mali (14 percent). The production of millets in Senegal, Sudan, Nigeria and Chad varies between 8 and 12 percent.

GRAZING

Pasture lands

The Islamic World is rich in grazing lands and possesses a little more than 482

millon hectares of permanent meadows and pasture lands which constitute about 16 percent of the 482 million hectares, two thirds (315 million hectares) lie in Muslim Africa and one-third in the Islamic Asian Region (167). Sudan possesses about one- third of the total pasture lands of Muslim Africa and long with the pasture lands of Sudan, Chad, Mauritania and Mali the area goes up to two-thirds of Muslim Africa.

In the Islamic Asian region Saudi Arabia possesses about half of the pasture lands of the Islamic Asian region (85 million hectares), while along with Turkey (26 million hectares), the total rises to two-thirds, and if the pasture land of Iran is also taken into account, the total would rise to three fourths of the pasture lands of the Islamic Asian region.

The grazing grounds constitute a valuable asset to the rearing of cattle, sheep, goats and camels.

Cattle population

The total cattle population of the Islamic World amounts to 177 million, about 10 percent of the total cattle population of the world. Of these the Islamic Asian region produces two thirds, while Muslim Africa possesses one-third. The Islamic Asian region produces about one-fifth of the cattle population of the whole of Asia and within the Islsmic Asian region, Bangladesh, pakistan and Turkey account for two-thirds of the Asian Islamic region.

In Muslim Africa, Sudan alone accounts for one-third of its cattle population and together with Mali and Morocco account for half of the total Muslim African cattle population.

Sheep and goats

So far as the position of sheep and goats is concerned the Islamic World produces about one-fifth (208 million) of the total sheep population of the world (100 million). Of the total number of sheep in the Islamic World Muslim Africe produces about 30 percent (6.5 million) and the Islamic Asian region about 70 percent (143 million). Of the total sheep in Muslim Africa, three-fourths are found in five countriss, namely, Algeria, Mali, Morocco, Sudan and Tunisia. In the Islamic Asian region again five countries namely Afghanistan, Iran, Iraq, Pakistan and Turkey contain three-fourths of the total sheep population of the region.

In the case of goats the Islamic World produces a little more than one-third (36 percent or 135 million) of the total goats in the world (398 million). Muslim Africa contains 40 percent (55 million) and the Islamic region of Asia 60 percent (80 million). Three- fourths of the goats of Muslim Africa are found in five countries, namely Algeria, Morocco, Niger, Somalia and Sudan, while the five countries of Asian Islamic region namely Bangladesh, Iran, pakistan, Turkey and Northern Yemen prduce more than four-fifths of the total goats of Asian Islamic region.

Cattle hide, sheep and goat skins

Of the total hide produced in the world (55 million metric tons) 0.32 million tons (about 6 percent) is produced in the Islamic world. Muslim Africa contributes 40 percent (90000 tons) and Islamic Asian region 60 percent (about 2,30,000 tons). Again the production of Muslim Africa is about 30 percent of the entire African production. Half of the cattle hides of Muslim Africa comes from Sudan, Egypt and Morocco and if the production of Algeria, Tunisia, Mali, Senegal and Chad is also included, the production amounts to over 80 percent of Muslim Africa.

In the Asian Islamic region, which contributes about one-fourth of the entire production of Asia, Bangladesh alone produces a little more than one third, and together with Indonesia, Pakistan, Turkey and Iran produce about 90 percent of the entire cattle hide production of the Islamic World.

As regards sheep skin, the Islamic World contributes about one-fifth (0.17 million tons) of the total world production (0.9 million tons). The Asian Islamic region contributes about 70 percent while Muslim Africa produces 30 percent of the entire production of the Islamic World. Again the Asian Islamic region contributes a little more than half (120000 tons) of the total production of sheep skin in Asia (239000 tons) while Muslim Africa produces about 40 percent (46000 tons) of the entire African production (115000 tons).

With regard to the total production of sheep skin in the Asian Islamic region, Turkey and Pakistan produce about one-third, and together with Afghanistan, Iran, Iraq contributes about 80 percent of the total production. In Muslim Africa Sudan is the leading producer; it contributes about one-fourth of the total production and together with Algeria, Egypt, Libya Mali, Morocco and Tunisia contribute about 90 percent of the sheep skin produced in Muslim Africa.

The production of goat skin in the Islamic World amounts to about 75000 tons which is 30 percent of the world production. The Asian Islamic region contributes 70 percent of the total production of the Islamic world and 30 percent of the entire production of Asia while Muslim Africa produces 30 percent of the Islamic World and about one-third of the entire African production. Bangladesh is the leading producer and contributes about one-fifth of the entire production of the Asian Islamic region and together with Indonesia, Iran, Pakistan, Turkey and Northern Yemen produce about 90 percent of the total production of Asian Islamic region.

Morocco and Somalia are the leading producers in Muslim Africa and contribute about one-third of the entire Muslim African production and together with Algerie, Egypt and Niger, Mali and Libya produce more than 80 percent of the total production.

GROWTH OF POPULATION AND FOOD RESOURCES

The analysis of agriculture and pasture resources of the Islamic world may become more meaningful if it is related to the growth of population in the Islamic world.

Fig. 1 shows the rate of growth of population of the Islamic world. The average of growth of population of all the countries of the Islamic World taking 1960 as the base is 2.8. In a period of 20 years the population of the Islamic World nearly doubled itself from 280 million in 1950 to 404 in 1970 and by the turn of the century it will cross 1000 million.

It would be worthwhile to consider the ratio between food production and population growth in the Islamic world. The following formula has been devised to obtain the ratio between food production and population growth:

$$\text{Food population growth ratio} = \frac{\text{Food growth index}}{\text{population growth index}}$$

If the ratio equals one it would mean that food production is just keeping pace with the growth of population. If it exceeds it this means that, production is faster than population growth and if it is less than one, population is increasing faster than food growth.

Fig.2 shows the food population growth ratio. It shows that the ratio equals

or Just exceeds one in 16 out of 31 countries of which 9 are in Africa and seven in Asia, but in the remaining 15 countries the pace of food production is much slower than population growth.

Rapid population growth poses complex problems for most of the countries of the Islamic world. However, the lag of food production behind the growth of domestic demand in almost all the countries of the Islamic world with few exeptions has greatly increased their dependence on food imports.

Increasing Agriculture production

Agriculture production can be increased in two ways: first, by increasing the area under cultivation and secondly by increasing the yield per hectare. As regards the extension in the area under cultivation, the statistics of land use, while mentioning the different uses of land in the various countries of the Islamic World, do not indicate in detail why the land classed as potentially productive are not being used. It would therefore be appropriate that a Central Land Use Organization be established by the Islamic World to co-ordinate the land use survey in each of the member countries according to a commonly agreed land use scheme. The Land Use Board in each country consisting of geographers, agricultural scientists, soil scientists, hydrologists and persons drawn from other relevant disciplines may help in planning a balanced land use. Such a survey will also help in a judicious crop planning and prove effective in the preservation of the best agricultural Lands.Mention may be made here that Great Britain during the forties was able to double her food production with thehelp of land use maps.The efforts of Saudi Arabia are commendable in this connection. During the 1960s the Government Commissioned Surveys on about half of agricultural production in nearly all areas under cultivation by improving water distribution and drainage system.

Yield per hectare

Table I shows the average yield of cereals (1971-73) in Kg. per hectare in the countries of the Islamic World. It will be seen from this table that fifteen out of the thirty countries considered, the yield is less than half of the world average and out of the fifteen countries the yield is less than one-third of the World average in eight countries. With the exception of three countries, namely Egypt, Indonesia and Malaysia, the yield in all the countries of the Islamic World is less than the World average.

In many countries of Muslim Africa and Islamic West Asia, the farmer is only one-eighth to one quarter as efficient a producer as his counterpart in Western Europe.

The reasons of this low level of agricultural production are complex. In the first place there are the handicaps of heat and aridity and their consequent effects on soil character. The soil in these countries lack humus. Further, when these soils are irrigated, they, in due course of time, turn saline.

In the Nile Delta heavy irrigation has induced soil salinty, and large irrigation schemes round Konya in Anatolia and along the Karun river in S.W. Iran failed to achieve success for this reason. In 1949 it was estimated that for the whole of Iarq some 60 percent of all irrigated land became salinated to a certain degree and that about 1 percent of the area is abandoned each year. The best remedy perhaps is to have extensive underground drains in the fields to prevent accumulation of excess water.

Another important factor is the usually high soil temperature during summer-in the range of 130^{O} to 180^{O}F, which has the effect of destroying organic material within the soil itself and of preventing the efficient use of fertilizers. Methods have to be devised for maintaining soil fertility by artificial means.

Another source of agricultural loss results through pests and diseases. About 60 percent of a year's crop may be destroyed by locusts, which breed in the deserts of Arabia, and Africa and move as swarms to cultivated area. Locust control on a big scale needs to be co-ordinated with FAO or UNESCO.

The systems of land holdings and forms of tenancy need improvement. Subdivisions and fragmentation of holdings prevent the use of modern ploughs and tractors. Land reform schemes have been introduced in many of the Islamic countries but needs to be introduced on a large scale. Redistribution of holdings and limiting the total area of land held by one individual will be of considerable help in increasing production.

TABLE 1
AVERAGE YIELD KG/HA

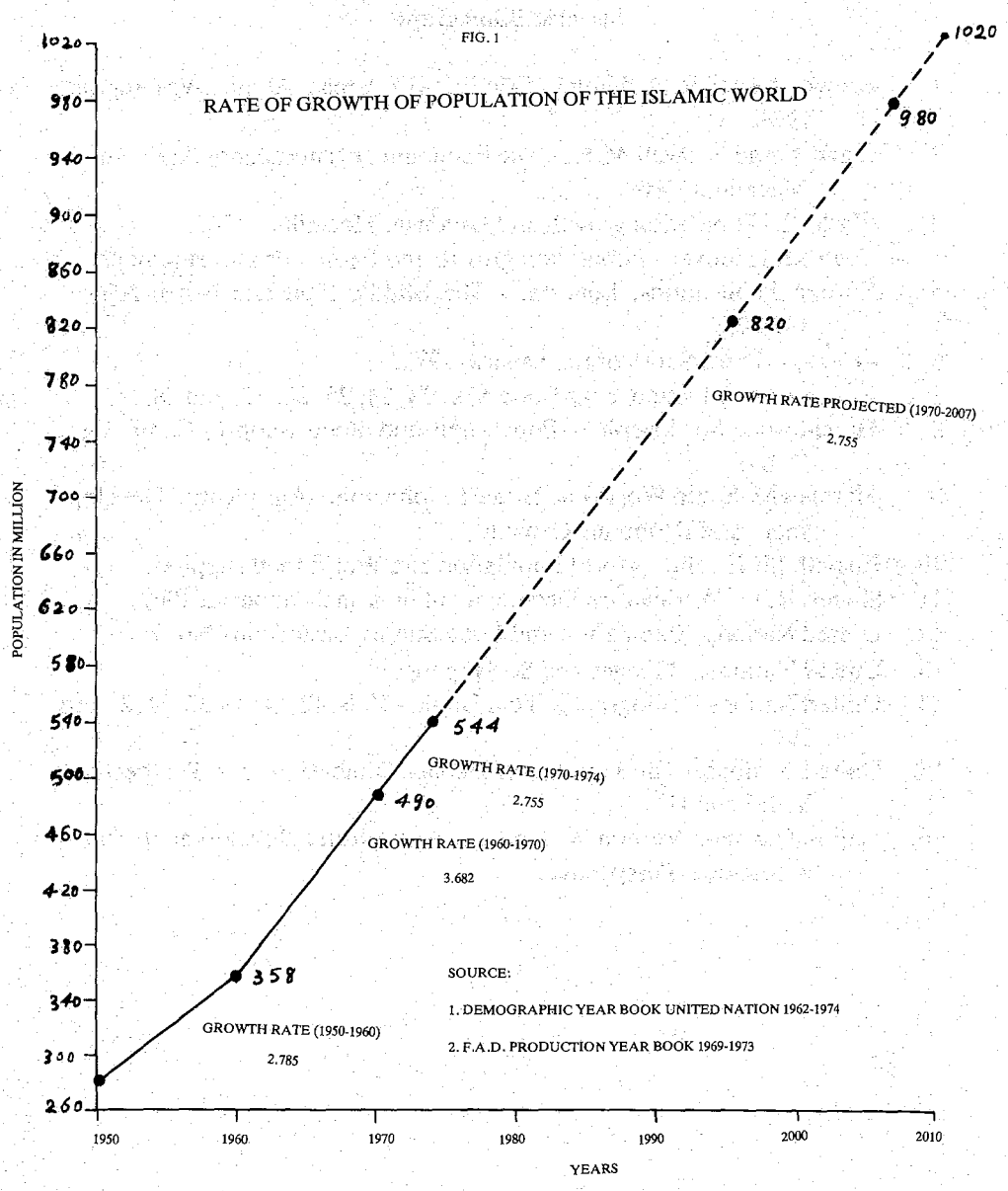
	World	1856
AFRICA:		
	Algeria	675
	Chad	615
	Egypt	3962
	Gambia	1083
	Guinea	775
	Mali	603
	Mauritania	246
	Morocco	1000
	Niger	426
	Senegal	531
	Sierra Leone	1361
	Somalia	227
	Sudan	735
	Tunisia	595
	Upper Volta	455
ASIA:		
	Afghanistan	1224
	Bangladesh	1651
	Indonesia	2008
	Iran	943
	Iraq	1116
	Jordan	618
	Lebanon	925
	Malaysia	2806
	Pakistan	1273
	Saudi Arabia	1232
	Syria	695
	Turkey	1395
	Yemen	908
	Yemen Democratic	1759

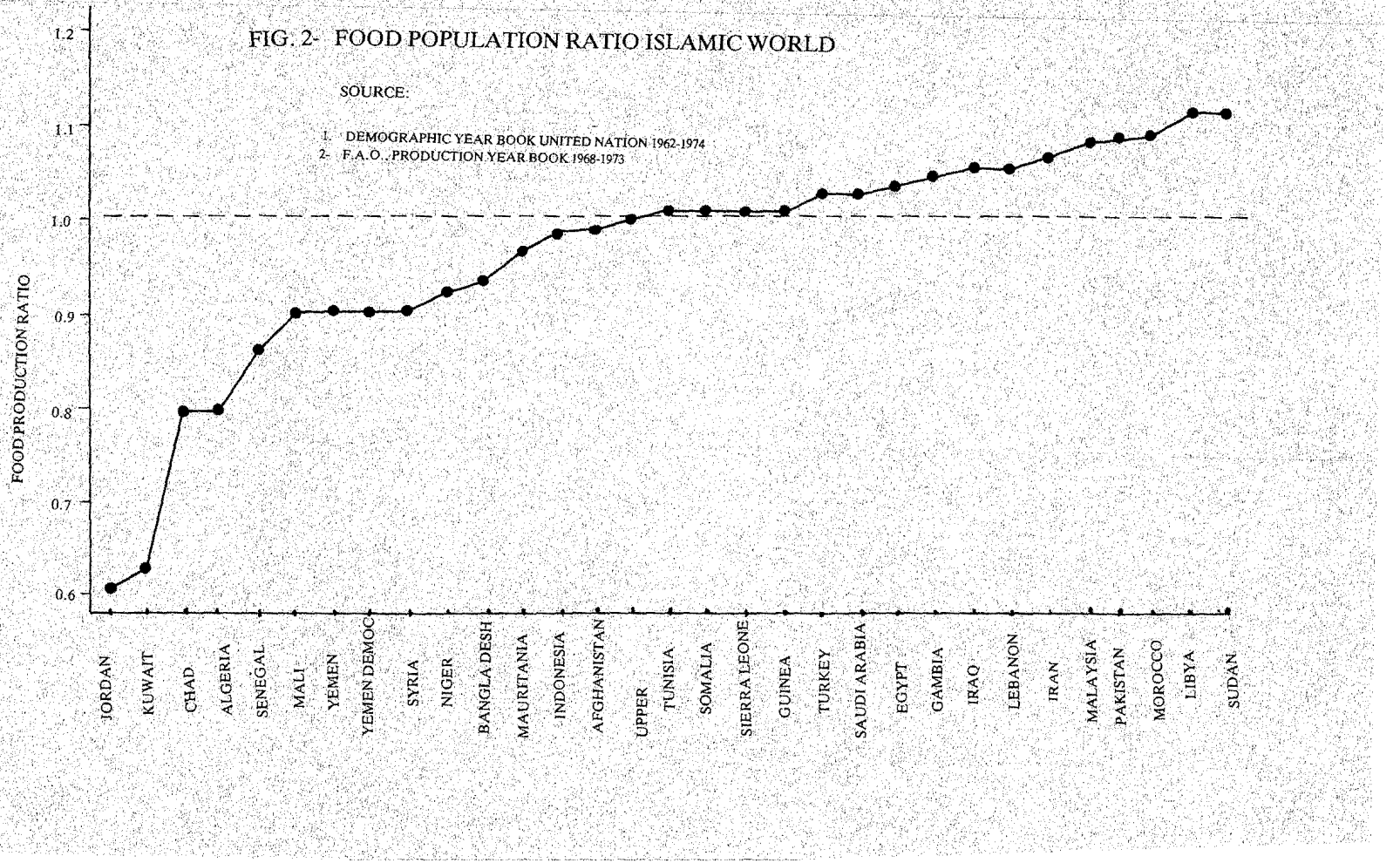
Source : F.A.O. Production Year Book, 1973

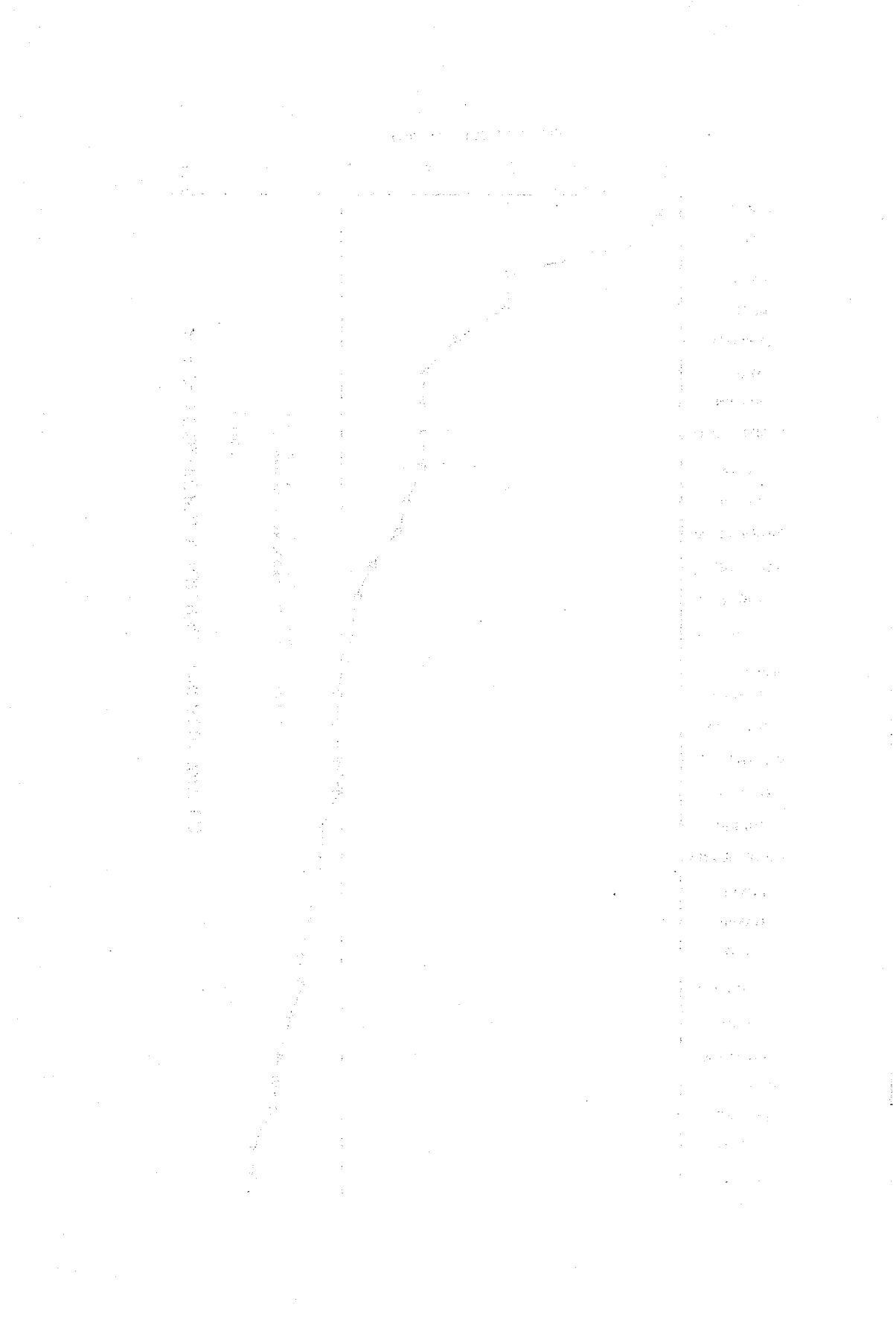
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FIG. 1


RATE OF GROWTH OF POPULATION OF THE ISLAMIC WORLD
POPULATION IN MILLION
1020
980
940
900
860
820
780
740
700
660
620
580
540
500
460
420
380
340
300
260
1950
1960
1970
1980
1990
2000
2010
YEARS
358
490
544
820
980
1020
GROWTH RATE (1950-1960)
2.785
GROWTH RATE (1960-1970)
3.682
GROWTH RATE (1970-1974)
2.755
GROWTH RATE PROJECTED (1970-2007)
2.755
SOURCE:
1. DEMOGRAPHIC YEAR BOOK UNITED NATION 1962-1974
2. F.A.D. PRODUCTION YEAR BOOK 1969-1973


FIG. 2- FOOD POPULATION RATIO ISLAMIC WORLD
SOURCE:
1. DEMOGRAPHIC YEAR BOOK UNITED NATION 1962-1974
2- F.A.O., PRODUCTION YEAR BOOK 1968-1973
FOOD PRODUCTION RATIO
1.2
1.1
1.0
0.9
0.8
0.7
0.6
JORDAN
KUWAIT
CHAD
ALGERIA
SENEGAL
MALI
YEMEN
YEMEN DEMOC
SYRIA
NIGER
BANGLADESH
MAURITANIA
INDONESIA
AFGHANISTAN
UPPER
TUNISIA
SOMALIA
SIERRA LEONE
GUINEA
TURKEY
SAUDI ARABIA
EGYPT
GAMBIA
IRAQ
LEBANON
IRAN
MALAYSIA
PAKISTAN
MOROCCO
LIBYA
SUDAN



RURAL DEVELOPMENT IN MOSLEM WORLD
(THE MALAYSIAN EXPERIENCE)

BY

A. S. ZAKARIA

INTRODUCTION

Since independence in 1957 Malaysia has embarked on a vigorous policy of development with rural development adopted as its main thrust. The concentration on rural development arises because of its need to improve the socio-economic problems of the rural population. Rural development in this country does not arise in a vaccuum. There is a challenging cry to redress the state of under development characterised by poverty, inadequate health facilities, poor housing and communication, illitracy and other related conditions. Although some Western scholars are of the opinion that rural development in Malaysia is associated with the emergence of competitive political system, having the electoral power located among the rural people, and an ultimate test of the inter-communal partnership of the political parties that made up the government of the day, local scholars feel that it is not just a mere political gimmick. It is a need to make independence really meaningful, especially to the rural mass.

This paper endevours to make a broad and general study of the steps taken by the Malaysian government towards improving the socio-economic conditions of the rural mass in peninsular Malaysia.

THE NEED FOR RURAL DEVELOPMENT

One of the key concepts in the theory of rural development is poverty. Poverty has many facets and not all are reducible to money. Before looking into the actual implementation of rural development programmes in this country it is best to look at the population structure in general. Table I shows that 58.15% of the total opulation of peninsular Malaysia are rural. Out of this 71.5% are Malays. Except for a few Indonesian Malays, all the Malays in peninsular Malaysia are Moslem and a very amall percentage of the non Malays are Moslem (Table 2). In this context, it can, therefore, be said that most of the Moslems in peninsular Malaysia are rural mass people.

TABLE I

POPULATION DISTRIBUTION OF PENINSULAR MALAYSIA (1970 census)

TOTAL POPULATION : 8,780,728						
Ethnic	Number	% of total population	URBAN Number	%	RURAL Number	%
Malay	4,663,284	53.1	690,166	14.8	3,973,118	85.2
Chinese	3,117,896	35.5	1,484,118	47.5	1,633,778	52.4
Indian	933,250	10,6	322,905	34.6	610,345	65.4
Others	66,298	0.8	27,050	40.8	39,248	59.2
TOTAL	8,780,728	100	2,524,239		6,256,489	

TABLE 2

THE MOSLEMS IN PENINSULAR MALAYSIA (1970 census)

Ethnic	Number	%
Malay	4,603,143	98.5
Chinese	5,342	0.1
Indian	62,778	1.3
Others	2,407	0.1
Total	4,673,670	53.2 % of total populaion

It is implicit that rural development projects will indirectly help to redress the underdeveloped Moslem community. This does not however, imply that the whole rural Moslem community in this country is in the state of poverty.

The 1970 census based on the poverty line of M$ 125.00 per month, indicated that, there were 791,800 poor familes. Out of this number, 584,200 families or 63.8% are Malays (Moslem). Taking 5.5 as the average family size, the number of poor Malays is 3,213,100 which is about 80% of the rural Malay population. In terms of national average income per family, the Malays earned only M$172.00 per month; Chinese, M$349.00;the Inadians,M$304,and Others earned M$ 813.00 per month, M$In view of fact that there are nearly 100 Malay millionaires and a few thousand earning M$ 1,500 and more a month, the picture at the other end of the scale becomes more grim.

Tables 3 and 4 show the distribution of literacy among the various racial groups. Table 3 shows that the level of literacy in penisular Malaysia, according to 1970 census, is only 41.93%. The literacy level between individual racial groups does not differ significantly. Therefore, in terms of literacy, the Malays are not poor compared to the other races. The Malay percentage is actually being bolstered by the high percentage of Malays who are not poor compared to the other races. The Malay percentage is actually being bolstered by the high percentage of Malays who are able to read and write verses from the Holy Quran and Hadith.

TABLE 3

LITERACY RATE (1970 census)

TOTAL = 3,682,103 (41.93% of the total population)			
Ethnic	Number	%	
Malay	1,959,303	42.02	
Chinese	1,278,785	41.01	
Indian	411,572	44.10	
Others	32,443	48.94	
Total	3,682,103		

Table 4 shows the number of people who never attended school. The Malays being at the top of the table are the poor citizens of the country in terms of shool attendance.

TABLE 4

NUMBER NEVER ATTENDED SCHOOL (1970 census)

Ethnic	Number	% of nos. never attended school	% of the total population
Malay	2,019,948	56.69	23.00
Chinese	1,148,329	32.23	13.07
Indian	367,4372	10.31	4.18
Others	27,558	0.77	0.31
Total	3,563.307		

RURAL PENINSULAR MALAYSIA

Ethnic	Number	%of nos. never attended school	% of the total population
Malay	1,672,039	72.68	19.04
Chinese	378,035	16.43	4.31
Indian	230,782	10.03	2.63
Others	19,697	0.86	0.22
Total			

Poverty and rual development become the vital topics and at time become a very sensitive issue not only among the politicians but also among the people on the street. Conseqently, racial prejudice unconsciously developed, culminated and finally exploded. Our worst experience was the 1969 racial riotin Kuala Lumpur. In view of all these and those of redressing the inequality, the Malaysian government has come out with various rral development projects. They are not very much highlighted by the increasing importance of the rural votes in our democratic system.

THE EMERGENCE OF POVERTY

In the words of professor Ungku A. Aziz (1964), poverty arises because of in-

equality in the distribution of income and inequality in the distribution of wealth. This state of affairs existed because of low productivity, exploitation and neglect.

The roots of the present poverty lie in the colonial period, when various laws were passed and administrative procedures were carried out largely for the benefit of commercial firms engaged in primary production. Land laws were designed not for rural development but to give security of title to investors in this country. Labour laws were designed not to protect native labour but to look after immigrant labour brought in to work on the estates and mines. The feudal structure of govrnment was weakened to allow perfect control by the colonial power. One of the most notabla features of the colonial administration was its neglect of the rural areas. Whether by intention or otherwise, the main effect of this neglect was the fossilisation of the rural people. They were left in the Malay Reservations, encouraged to cultivate padi, the crop that gave the lowest income and were given an education that qualified them for no particular occupation since it was confined solely to primary education in the Malay language.

No one appeared to be aware that the large scale immigrant of labour from the surrounding countries would create sociological, political and economic problems. Nobody appeared to be worried about the land laws that created inequalities in the distribution of rural wealth through subdivision and fragmentation, which in turn increased the poverty in the rural areas. Neither was there undue embarrassment at the trend for farm land to be increasingly owned by non- farmers or by urban investors. In short, when the roots of rural poverty were being planted, nobody seemed concerned that the consequences of the Colonial Administration could be rural poverty in the future.

Immediately after independence the national leadership had its attention on creating Malay traders, Malay contractors and Malay capitalists as a solution to the (malay Economic problem). By so doing the Malay leaders failed to see the need for the elimination of rural poverty as a separate issue deserving priority of treatment.

RURAL DEVELOPMENT

Malaysian rural development strategies and policies are well documented in the First and Second Five-Year plans (1956-1965) and the first, second and third Malaysia plans (1966-1980). Behind the government strategy for rural de-

velopment lay an evalution of the cause of Malay agricultural malaise. In the official view, widely shared though not without its critics, rural retardation stemmed from some 'defect' in the Malay peasant psychology and thinking- that rendered him imprevious to economic advantage.

Although rural development was initiated in the First Five Year Plan (1956-1960), it was taken seriously only after the government sustained important losses in the 1959 General Election, especially on the rural east coast of peninsular Malaysia. The government's response to the electoral losses was to greatly expand its commitment to rural development in the Second Five-Year plan (1961-1965), incorporating a National rural Development plan.

Agriculture carried a nominal first priority in the First Five Year plan although the government preferred to generate 'enthusiasm and desire' for agricultural development by means of improved organization, co-operation and provision of infrastructure. Plan policy laid strong emphasis on the more advanced, urban sectors while trusting in backwash effects to convey development into the rural economy. To facilitate the operation of these linkages, the plan provided for a "substantial" expansion of marketing mechanisms through improved rural transport, credit and co-operation. The government, on the other hand, failed to provide a definite agricultural development programme. Absentee landlordism was rife in the ricebowl of peninsular Malaysia. By late 1958, it had become quite apparent that the First Five-Year plan approach had failed to prevent the continued decline of Malay fortunes.

The 1959 general election saw the turning point in the government's approach towards the rural develoment problems. Direct rural development policies began to appear and being documented in the Second Five-Year plan (1961-1965) and the three Malaysia plans (1966-1980).

Generally, two approaches have been adopted namely:

a) Basic-Needs Approach.
b) Commodity Approach.

Through the basic- needs approach, roads, water supplies, clinics, telephones, electricity, schools and community halls were being provided on a relatively large scale. That these schemes are good in themselves is absolutely undeniable. However, without other steps, they may bring about further increases in inequlity inside the rural areas and hence defeating the main objective of the whole scheme. The period between 1960 and 1970 was fixed as the

time when the above facilities would be provided. Although the target date passed 8 Years ago there are still areas which do not get these facilities at all. This,however,cannot be used as a measure of success or failure of the programme. There are various obstacles that have to be considered before a final judgement can be made. For example, the tug-of-war between State Government and Federal government and between government and local assemblymen can greatly cause the impediment of the programme. Likewise, the quality and quantity of manpower carrying out the government's programme have great influence on the success.

The commodity approach is oriented towards the increase in production at the smallholdings farms levels. Through this progamme farmers are encouraged to replant their crops with high quality clones, improved crop husbandary and practised double- cropping. This approach does not only improve the production but also the quality of the products. The double-cropping of padi is also aimed at achieving self-sufficiency in this product. In addition to the above improvements to the existing farms and holdings, the programme also includes land development which aims at producing modern small holders with optimum land size and central management and processing facilities. Up to 1975, more than 70,000 settlers had the benefit of the programme. Out of this figure 90% are Malays. The settlers are the landless or those having uneconomic land size.

Other services, like marketing, finance, research and those related to production are incorporated in the overall rural development programme.

Generally, the rural development programmes implemented had successfully improved the living conditions of the rural population of this country. The following Table 5 shows some of the improved conditions in 1970 compared to those in 1957. In terms of the Malay monetory income, there was an increase from M$139.00 in 1968 to M$222.00 in 1973. The increase from 1970 to 1973 was 29%. However, during the same period the cost of living had gone up by 16%. Therefore, the actual increase between 1970-1973 was only 13%. The percentage of Malays earning less than M$120.00 had decreased from 49.3% in 1970 to 45.5% in 1973, after adjusting the increase in the cost living. The figure for the rural area as a whole is more encouraging. The monthly average income recoded in 1967/68 was M$119.00 and that recorded in 1973 was M$282.00 an increase of 137%. Even if the increase in the cost of living during the period was 30%, the increase in the average monthly rural income was still more than 100%.

THBLE 5
SELECTED STATISTICS OF RURAL POPULATION OF PENINSULAR MALAYSIA

Variables	1957	1970
Infant Mortality Rate	9.56%	4.76%
Life expectancy (Male)	5?.2 Years	62.4 Years
Life expectancy (Female)	53.4 Years	64.2 Years
Completed Secondary Education		
(Male)	1.4 %	
(Female)	0.1 %	

Since the main objective of the rual development in Malaysia is to indirectly improve the average income of the rural population through improvements in agricultural productivity, now let us look at those 'Target Groups' separately. The four groups being directly involved in all the rural development programmes are:

1. padi farmers
2. rubber smallholders
3. coconut smallholders
4. fishermen

i) Padi Farmers

Except for small pockets in the states of Selangor and Kelantan, padi farmers are Malays. The physical development afforded by the government for this group, besides the infrastructure, are the irrigation schemes and the Hield Variety seeds. Before the introduction of the HYVs and the irrigation schemes, especially in the rice bowls of Malaysia (States of Kadah and Kelantan), the yield of rice per hactre was relatively low. For example, in the state of Kedah the Yield in 1973/74 exeeded 470 bushels/hactre compared to 336 bushels/hactre in 1970. A similar pattern was observed in the Kemubu Irrigation Scheme in the

state of Kelantan. The average yield of the nation increased from 225 bushels/ hactre in 1957 to over 278 bushels/ hactre in 1975. The irrigation scheme had made possible the double cropping of padi.

With the increase in the yield one may ask, does it really help to increase the income of the farmers or is the difference is being absorbed by the operation, capital and inflationary costs? Lai (1977) in his work on income distribution of padi farmers in Muda Irrigation scheme showed that there was an increase of 60% in the net income of the farmers, who practised double-cropping on farms not less than 2.0 hactres in size. The percentage increase cannot, however, be maintained throughout. It depends very much on the fluctuations of the production cost, environment conditions and market price of padi. The first two factors cannot be effectively controlled since they depend very much on the global economic atmosphere and atmospheric conditions.

In the other parts of the country the problem is being complicated by the poor soil conditions since all the padi areas in Malaysia are with suitable or rich-padi soils. In these areas the Yield/hactre remaied low inspite of all the efforts mad to improve it Therefore, we have two differnt classes of padi farmers in this country.

II. Rubber smallholders

Rubber smallholders are mostly in the states of Perak, Selangor, Johore and Pahang. The average farm size is 2.55 hactres. However, 75% of the Malay smallholders owned holdings less than 2.0 hactres while the majority of the Chinese owned holdings approximately more than 4.1 hactres (Sulaiman Mahab, 1978). Two hactres is considered as the economically insufficient size. A- 1975 studies showed that nearly 50% of the Malay holdings recorded very low procductivity, compared to only 29% of the Chinese holdings. The reason was that the Malay smallholders did not plant high yielding clones in their holdings and hence developing a great gap in terms of income, between the Malay and the Chinese rubber smallholders.

The above situation was worsened by the inefficient marketing facilities in the rural areas. Based on the 1975 rubber price, the net income for the low yield rubber wasM$ 691/ hactre while the net income from the high yield rubber was M$ 1,087/hactre. Therefore, there was a difference of about 55-60% in income between about 50% Malay rubber smallholders and the rest. Realising this Ma-

laysian government set up a statutory body, the Rubber Industry Small Holders Development Authority (RISDA) on lst. January, 1973 to look into the matter. Modernization in rubber production was the first target of this body. It endeavoured not only to improve the physical aspect of rubber production but also to educate the smallholders in marketing and develoment processes. In short this body was trying to implement an integrated approach in rubber production among amallhodrs. To achieve these objectives RISDA, among many, outlined the following programmes to be carried out:

i) wide scale replanting
ii) encourage intercropping
iii) central processing, systematic and effective marketing and credit facilities
iv) training through group activities
v) rehabilitaion of the unused land

Table 6 shows the trend in the increase of production by rubber small holders. This overall picture reflects the improvement so far achieved. With the increase in the rubber price since 1975, the per capita income of smallholders is expected to increease.

iii) Coconut Smallholders

The coconut production in this country is in a doldrum. The export price and yield had been deteriorating. However the rate of poverty among this target group is lower than those of padi farmers and rubber smallholders.

TABLE 6
RUBBER PRODUCTION BY SMALLHOLDERS

Year	Output	
	Tonnes ('000)	% of total rubber output
1973	791.67	54.0
1974	801.12	53.9
1975	830.79	57.7
1976	898.88	56.6
January-March 1977	230.79	58.7

In an attempt to improve the situation, the government in 1963, through the department of Agriculture introduced the rehabilitation scheme. Through the scheme the irrigation system was improved, replantation of holdings with high quality nuts was carried out and the smallholders were encouraged to practise intercropping, especially with coffee and cocoa. The scheme hoped to increase the production of coconut by 25% and to increase the smallholders income through the sale of coffee and cocoa. During the 1963 and 1975 period about 40,939 hactres of smallholdings were rehabilitated or replanted (Table 7) covering 21% of the total national coconut acreage.

TABLE 7
REHABILITATION AND REPLANTING OF COCONUT SMALLHOLDINGS (1975)

State	Target area (hactres)	participating (hactres)	% of the total target
Johore	15,630	13,604	86.48
Perak	12,147	10,553	86.88
Kelantan	6,843	5,205	76.06
Penang	3,725	3,072	82.47
Selangor	7,410	7,131	96.14
Malacca	1,356	1,123	82.81
Trengganu	445	251	56.36
Total	47,656	40,939	85.9

The rehabiltation and replanting programmes cannot provide sufficient income for the farmers unless coffee or cocoa is planted alongside as intercrop. However the acreage planted with inter crop up to 1975 was not satisfactory. Only 5,590 hactres were planted compared to the 40,939 hactres of coconut area being rehabilitated and replanted. To complicate the matter cocoa and coffee are not suitable to the 'beris' soil found in Trengganu and Kelantan.

IV. Fishermen

This group has the highest poverty rate, about 70% in 1970. The rate is higher in the east coast of peninsular Malaysia where nearly all the fishermen are Malays. On the national scale, there is a very clear difference in the income incurred by the Malay and Chinese fishermen. Accordinng to the 1972 census only 14%of the Malay fishermen earned M$ 200/month compared to 47.1%

Chinese. The difference was mainly due to types of equipment used. The non-Malays used better equipment because they had money to invest. In 1973 only 5% of the total trawlers in Kedah and penang (Northern part of peninsularMalaysia) was owned by the Malays.

In its attempt to improve this target group, the Malaysian government built fishing harbours and landing jetties, extended credit facilities and improved marketing facilities. This has helped greatly in the production among the fishermen (Sulaiman Mahbob, 1978).

CONCLUSION

This paper tries to give a very broad and general picture of attempts taken by the government and its agencies to eliminate poverty in rural areas of peninsular Malaysia,The operation of all the schemes is actually very complicated. Although the schemes look attractive and beautiful in the operation rooms it is not so when it is implemented. There is no short cut in development. This is so since the prime factor involved are human beings of different cultural, social religious and economic background. It is realised that development is an integrated phenomenon where the human being and its attributes are as important as the finance or land that are available. Without considering the farmer, the development programme, however good it may be, will not meet with success.

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SPATIAL DISTRIBUTION AND POTENTIAL DEVELOPMENT OF AGRO-PASTORAL RESOURSES IN SOMALIA

BY

OSMAN, M. NOOR

Abstract

Khalwa or (Quranic school) is the traditional institution of education in the Sudan as well as in all Muslim Africa. This paper seeks to highlight some of the spatial aspects of Khalwa e.g its distribution and its impact on the economy, population mobility, spatial diffusion of religious knowledge and modernization promoting concepts.

On grounds of data collected mainly by an especially designed questionnaire the following indights have been extracted

1 - Khalwa enhances several patterns of mobility at the local, regional and international scales;
2 - Khalwa attenders, utilizing their leisure time, provide labour for agriculture as well as other practices in the study Area;
3 - The institution is currently receding infront of secular education nevertheless it has the potential to exist and improve.
4 - and finally, Khalwa had been one of the channels that Muslim preachers had utilized and are still utilizing intensively in the proliferation of their religious precepts.

INTRODUCTION

The Somali Republic has a surface area of 632,885 square kilometers and sxtends from I° 38″ S to 1 20″ N latitudes . The northern rigions of Somalia have four geographical regions: The narrow desertic coastal plains known as the Guban (or burned); the maritime range of rugged hills, the Ogo and the Marjetainian mountains; the Ogo plateau which is charactrized by shallow valleys tugs (dry river beds) and permanent wells that provide water to the livestock during the dry seasons; and finally the west flat semi-desert areas of the Haud, South of the Ogo plateau, with many valleys and many natural depressions that become temporary lakes after the rains and also provide wet season grazing land.

The Southern region has the Nugal valley to the North and the arid expanse of Mudugh plain which alone covers about 107,700 square kilometers of land. Southwestwards lie the low lands between the two rivers the Shebele and Juba.

Most of the country is hot and dry for most part of the year. There are mainly four seasons: (i) The jilal season is from January to March when it is hot and dry, (ii) the Gu' season from April to June, the hottest and the most humid period, (iii) the Magai season from July to September a dry season and (iv) the season from October to December charactarized by low rainfall.

AGRICULTURE AND ANIMAL HUSBANDRY

SALIENT FEATURES

Although crop husbandry is limited to a small fraction of the total land area of the country, the population derives its basic subsistance from cultivation of the Soil. In addition, the large segment of nomadic pastoralists depends upon domestic agricultural production for its staple agricultural foodstuffs, paritcularly grain. Agriculture further provides products for export to the extent of one-third of the total value of exports, and thus provides income which makes possible the importation of commodities required by the population and which are not produced locally.

The largest part of indigenous agriculture depends upon an irregular and un-

certain rainfall, and recurrent droughts subject the population to constant threats of crop failure and famine. Indigenous farmers utilise the simplest tools and techniques and concentrate on the growing of staple food crops such as dorra (Sorghum), maize, beans and sesame seed, which they in part consume and sell or exchange the remainder to obtain additional food stuffs and commodities necessary for their existence.

Numerous plant diseases ravage the crops and reduce yields substantially. Moreover, the presence of malaria, water-borne diseases and tse- tse limit productive area in extent, prevent mixed farming and afflict the agricultural population with debilitating ailments. Moreover, health, educational and social services in general are minimal in the indigenous agricultural communities.

Animal husbandry substains more than one-half of the population of Somallia. The pastoralists pursue nomadic life under the necessity of obtaining forage and water resources and a harsh climate.

In Somalia livestock and livestock products are the major source of wealth and income and the basic foreign exchange earner. About 70 per cent of Somalia'S foreign exchange earnings are obtained from the export of livestock and live stock products. In the nomadic sector, where an estimated 55 per cent the population lives, livestock and their products are the only source of living and existence. In the rural areas, livestock and their products constitute major supplementary income and/ or source of living for the rural population, which is estimated to constitute one quarter of the total population.

In context of climatic conditons it is easy to visualise the factors prompting the nomads to move. These factors are: need for grazing and water avoidance of excessively hot areas, inter-nomadic group relations, natural barriers to movement, stock and human diseases etc.

The development of livestock resources along sound, even if simple, lines is of fundamental economic importance, no other sector of the economy so closely affects the life of so many people and has so large an unrealised export, potential. The production of livetock is so intertwined with the life and living of the Somali people that its revolution is also of fundamental social significance, in mind, attempts must be made to regionalise the country in context of spatial distribution and potential development of agro-pastoral resources of the country.

SPATIAL DISTRIBUTION AND POTENIIAL DEVELOPMENT OF AGRO- PASTORAL RESOURCES

The idea of this research work is to regionalise the country in context of spatial distribution and potential development of agro-pastoral resources of the country. According to the existing and potential agro-pastoral resources some areas in the country are delineated as regions. The regions will differ according to their agro-pastoral complex. Some regions may have a vast development potential while others may be less promising and the remaining may be considered as problem areas which have almost no scope for potential development and from where there is a sizeable amount of urbanward migration leaving those areas empty and depopulated.

The aim of this research project is to find the ways and means to remove regional balances in order to give aqual development apportunities to all the people in matters of resources available. In regard to speed up the growth and development process more attention will be paid to some regions in order to develop their potential in such a way as to contrilbute to the development of the country as a whole.

Attempt will be made to focus our consideration on concept of regional contribution to the development of the country as a whole.There some regions which are making substantial contributions whilè some regions have big potential and call for considerable investment for their development.

According to recent administrative changes the country is divided into 68 districts, being basic administrative units and 15 regions. The regions are of varying size and varying number of districts, ranging from 3 (Sanaag) to 7 (lower Shabelle) districts. Attempts will be made to assess the existing or developmental disparities in the agro-pastoral framework and to group the regions and districts on the basis of available data using certain appropriate statistical techniques.

The basic characteristics of regionalisation will be analysed on two indicators, i.e. livestock and area under crops. The area suitable for cultivation is rather small. According to the estimates of the Ministry of Agriculture the area of the Somali Democratic Republic is divided as follows.

	Million Hectares	
Area suitable for cultivation	8.2	12.9%
Area suitable for livestock raising	28.8	45.1%
Other area	26.8	42.0%
	63.8	100.0

The area under cultivation now is about 815,000 hectares. Of this, 240,000 hectares are artificially irrigated and another 240,000 hectares are naturally irrigated due to the overflow of rivers.

Viewing geographical distribution of livestock, areas under crops, population, water points, rainfall and river- basin development, we can discern their different composition and intensity in various parts of the country, which will require different treatment in the course of development. More than 70 per cent of the population are nomads and the export of livestock contributes about 70 per cent of the export. Both the population and livestock are differently associated in the spaital organisation. Most of the people engaged in agriculture are subsistence farmers but banana and sugar planatations are also found on the banks of the two main rivers. The area under crops varies among different regions depending upon the nature of geographical factors. Although, the livestock is spread all over the country, their concentration vairies from place to place.

Generally speaking, the northern and central regions depend more heavily on the livestock. The southern regions, for example, Shabelle, Juba and interriverine regions, also depend considerably on the livestock but about 85-88 per cent of all agricultral and industrial production is located in them.

Bakool and Nugal regions are the most backward regions in the country. They are with moderate cattle population, little area under crops and most sparsely populated area. Juba region ranks higher in matters of present agropastoral development. Nevertheless it should get relatively less investment for development as compared with other regions. In context agriculture, livestock and water potential of the Juba region, it would be logical to invest relatively more in this region than in the rest, since developing the agro-pastoral complex of this region will make the greatest contribution of the national economy.

West Galbed and lower Shabelle regions have been benefitted from the vic-

inity of Hargeisa and Mogadishu respectively. In the case of both these regions the impetus was the gravitational influence of both centres in matters of commerical, financial and administrative activities. Kismayo has provided the similar impetus to the agro-pastoral development of lower and Middle Juba regions.

Mudug, Togdher and Galgadud regions are characterized by large numbers of livestock but with almost no agricultural productive areas. Bakool, Nugal, Sanaag and Bari regions are the most underdevelped regions calling for attention to the development of their agro-pastoral resources.

Natural resources of the Juba River Basin have not been developed on a large scale. This is the most potential area for development. Shabelle River and Interriverine regions have surplus food production. Hence other regions should be developed in respect of food poduction in the light of infrastructure facilities.

SUMMERY

In this research project attempts are made to analyse the spatial patterns of agro- pastoral development and pinpoint the areas of pastoral and agricultural resources for potential development. The aim will be to ermove the ergional imbalances in the develomental sectors of agro-pastoral complex on a nationwide scale.

ISLAM CONFRÈRIQUE ET DYNAMIQUE DE L'ESPACE RURAL AU SÉNÉGAL.

PROF. CHEIKA BA.

ISLAM CONFRÉRIQUE ET DYNAMIQUE DE L'ESPACE RURAL AU SÉNÉGAL.

Introduction : Le Sénégal est un pays de tradition islamique déjà ancienne. Il fait partie des premières régions du Soudan occidental à connaitre les mouvements et courants d'islamisation venant du Nord de L'Afrique, à travers le sahara, dès les premiers siècles de L'expansion islamique dans le monde.

Aujourd'hui l'Islam est devenu l'un des traits de la culture nationale sénégalaise les plus importants.

La permanence du fait islamique dans la géographie du Sénégal est frappante à plus d'un titre.

L'Islam est un phénomène massif dans un pays peu étendu et peu peuplé : 197.000 Km^2 occupés par 5085.000 habitants dont 80% de musulmans.

L'Islam s'est implanté dans toutes les régions du Sénégal, parmi toutes les formations (une vingtaine au total).

Bien sûr le phénomène n'est pas sans différenciations régionales: les régions septentrionales et intérieures, plus ouvertes sur le sahara et peuplées surtout d'arabophones, de Haalpulaaren (ceux qui parlent la langue des peul ou pulaar) et de wolof (35% de la population totale du Sénégal), sont plus profondément islamisées que les régions côtières et méridionales où l'emprise chrétienne est notable.

L'habitat, la toponymie de la vie sociale restent grevés de la culture arabo- islamique (ubiquité des mosquées, duara ou institutions d'éducation islamique, zaawiya, toponymes, onomastique...).

La vie économique et de relation porte, en outre, les marques de la civilisation islami que, notamment dans l'agriculture,le commerce, l'économie urbaine et les relations villes- campagnes.

Toute cette conception des rapports Islam- milieu sénégalais repose fondamentalement sur la confrérie. Celle- ci est réellement le principe d'organisation de l'espace islamique, notamment de l'espace rural.

Introduite par des élémonts sahariens dès le IXe siècle, elle s'est rapidement propagée et a permis l'intégration plus rapide et fécondante entre les élémonts des cultures islamique et africaine.

Aujoud'hui les principales confréries sont le Muriidisme, la tijaaniyya (avec de multiples variantes), le Qaadiriyya★.

Notre présente communication insistera plus particulièrement sur les deux premières, leurs techmiques de conquête du milieu rural. Après en avoir analysé les modalités, elle dégagera l'essentiel des problèmes de l'implication du fait religieux dans les politiques d'organisation de l'espace. Mais auparavant il nous paraît indispensable de souligner avec plus de détails le phénomène évoqué bien au début, c'est- à- dire l'ancienneté et l'actualité de l'Islam dans l'élaboration et la dynamique du milieu géographique au Sénégal.

I - Fait islami que et géographique : ancienneté et actualité de leur rapport au Sénégal.

1. Les débuts de l'Isam confrérique dans l'espace sénégalais.

Ce qui frappe avant tout au Sénégal c'est non seulement la ferveur religieuse, mais encore la marque des faits islamiques dans le paysage et dans la vie sociale.

La position géographique du Sénégal en a fait dans le soudan occidental un pays de convergence et un important foyer de réflexion de courants ethnodémographiques, commerciaux, politiques et islamiques.

La large ouverture sur le sahara est la base de facilité de pénétration, par la vallée du sénégal, des éléments de civilisation arabo- berbère pendant la grande période d'expansion de l'Islam, dés le XIIIe siècle: la langue arabe, l'enseignement du Coran et de la civilisation islamique...

Les courants sahariens de conquête politique, de commerce et de prosélytisme islamique ont d'abord intéressé la vallée du sénégal.

La vallée du sénégal devint alors un important foyer islamique. Elle a été aussi le point de départ de l'islamisation du reste du sénégal.

Aux siècles suivants, notamment à partir du XIVe siècle, l'Islam a gagné les pays et royaumes noirs situés plus au sud, depuis le royaume du Wolof au Nord jusqu'aux régions méridionales plus intégrées alors à l'empire du Mali.

Mais il va falloir attendre la deuxième moitié du XVIIIe siècle et surtout le XIXe siècle pour voir se développer plus rapidement et plus massivement l'Islam. Le prosélytisme de type saharien est définitivement relayé par l'action des noirs sénégalais, formés du reste dans la tradition arabo- berbère.

★ Du point de vue de l'Islam, les ordres soufis ont été critiqué à cause de certaines de leurs instructions sur la foi, les rites et la conduite, qui ne sont pas conformés à celles des sources de l'Islam: - le coran et la sounna. Cependant, ces ordres Soufis ont parfois joué un rôl quant à la propagation de l'Islam, le renforcement des rapports entre les Musulmans et le vourrissement des sentiments religieux, surtout durant les derniers siecles ou le pouvoir politique des Musulmans s'etait affaibli donnant ainsi lieu, à l'invasion des missionnaires et du colonialisme. L'Afrique nous en donne un exemple typique. (Le Secrétariat Général de la Conference)

Les cheikh maures leur laissèrent surtout la tradition maraboutique. Celle-ci est d'une importance capital pour comprendre la signification géographique des faits islamiques au sénégal. Elle repose d'abourd sur une organisation de type confrérique, ensuite sur l'existence et l'influence de chcikh ou marabout (serifi en wolof, ceerno en pulaar...), enfin sur les "réduits" (ribaat, zawiya, daara, medersa...).

Ceux-ci sont donc les points d'organisation de l'espace islamique, voire confrérique. C'est sur eux que repose toute l'organisation confrérique de l'espace.

Les principales confréries sont par ordre d'ancienneté: la Qaadiriyya, la Tijaaniyya, le Muriidisme.

La Qaadiriyya remonte, comme son nom l'indique, à Abd-al-Qaadir al-Jiilaani. Elle comprend plusieurs subdivisions dont la plus importante dans le pays est celle fondée par le cheikh Bun Kunta et dont le centre principal se trouve à Njaasaan, entre les villes de Thiès et de Tiwawone.

La Tijaaniyya est issue du cheikh Ahmed al Tijaani dont le tombeau se trouve à Fès, au Maroc, important lieu de pélerinage annuel de milliers de sénégalais, Cette confrérie comporte aussi de nombreuses sections, Les plus notables sont représentées par celles nées des courants de revivification confrérique du XIXe siécle: le tijaanisme omarien (du Cheikh Omar Taal, originaire de la moyenne vallée du Sénégal), le tijaanisme malikien (du Cheikh El Haaj Malik Sy, originaire de la basse vallée du Sénégal et installé à Tiwawone), le tijaanisme laayeen (issu du Cheikh Seydi Limaanu Laay Caw installé à Yof dans la banlieue dakaroise), le tijaanisme Ñaseen (dont le plus illustre est le Cheikh Ibrahima Ñas qui vient de s'éteindre il y a seulement trois ans).

La Tijaaniyya compte actuellement près d'un million d'adeptes, mais son expression géographique reste encore peu nette, surtout dans le domaine rural. La branche la plus intéressante à ce projet est celle qu'on pourrait qualifier de néo-omarien et qui s'est développée en Haute-Casamance par le Cheikh Peul Ceerno Mamadou Saydu Ba, Nous développerons son exemple plus loin.

Le Muriidisme est de loin la confrérie la plus authentiquement négro-sénéglaise. Elle a été fondée ã la fin du siècle dernier par le Cheikh Amadu Bamba Mbakke, de son vrai nom Ahmed ben Muhammad ben Habîb-Allah. Il est plus couramment connu sous les noms de Serifi Tuuba (ou Cheikh de Tuuba, la capitale du Muriidisme), Xaadimu Rasool (ami dévoué du prophète).

Le Muriidisme compte aujourd'hui plus d'un million d'adeptes. C'est le deuxième exemple que nous développerons dans le chapitre suivant.

2. Confréries et espace géographique sénégalais

Ces confréries ont pu se maintenir, s'organiser, s'implanter et se développer

malgré la politique christiano- coloniale de l'administration française au Sénégal, de la deuxième moitié du XIXe siècle à la première moitiè du XXe siòcle. Elles sont aussi un des èléments majeurs de l'espace sénégalais.

La facilité et la vigueur avec lesquelles elles se sont implantées ont conduit plus tard celle- ci à les utiliser non seulement comme assise politique, mais encore comme cadre et moyen d'organisation de l'économie coloniale, l'èconomie agricole notamment. L'immense main- d'oeuvre de disciples, plus ou moins en dehors de l'emprise culturelle française, a Servi en effet à asseoir et développer les cultures commerciales, notamment la culture de l'arachide. Quand on sait le rôle économique et l'emprise spatiale de celle- ci au sénégal, on se rend bien compte de l'importance et de la dimension de notre problématique: problématique de l'organisation géoislamique rural au sénégal.

II - Confrérie et organisation de l'espace rural sénégalais

1. Deux exemples originaux.

Il s'agit de deux formes d'illustration de conquêtes pionnières agricoles dans un cadre confrérique: la forme mouriid et la forme néo- omarienne représentée á Madina Gunaas, résidence de Ceerno Mamadu Saydu Ba.

a) L'espace muriid. C'est loin le plus important sur le plan organisationnel et sur le plan spatial.

Les Muriid occupent actuellement les parties orientale et méridionale du bassin arachidier. L'inter- action de l'expansion de la confrérie et de l'extension de la culture de l'arachide depuis les années 1920 a été analysée par beaucoup de chercheurs (voir petite bibliographie jointe).

Ce que nous retiendrons et qui fonde parfaitement l'originalité du Muriidisme, c'est l'efficacité de la mise en pratique de l'enseignement du Cheikh Amadou Bamba. Son enseignement valorise, entre autres, le recueillement, l'obéissance conséquente au Cheikh, l'amour actif et sans limite du travail.

La recueillement, dans la pure tradition mystique, a facilité la prolifération extrêmement rapide des "daara". Celles- ci sont avant tout fondations, mieux des établissements ruraux destinés non seulement à l'animation des institutions islamo- confrérique, mais encore à jouer le rôle de cellules de base de production et de centres d'organisation sinon d'occupation de l'espac.

La daara eat créée par un cheikh confrérique, qu'il soit fils, petit- fils ou non du fondateur de la confrérie. Son pouvoir "charismatique" assure la cohésion et la mise en mouvement de la masse de disciples ou talibés. Il facilite donc le fonctionnement de cette masse comme importante force de travail libérable grâce à l'observance du principe de l'amour actif et sans limite du travail.

Tels sont donc les principes de base de la conception et de l'organisation de l'espace muriid au Sénégal.

Mais celui- ci s'est organisé grâce à un contexte historico- économique particulier.

La confrérie a pu récupérer une force de travail considérable grâce à la suite du démembrement, à la fin du XIXe siècle, de tous les royaumes précoloniaux, notamment le royaume wolof du Kajoor. Ces nombreux bras ont pu, par la suite, être mis au service de la culture pionnière de l'arachide, Celle- ci été intensément et subtilement encouragée par l'administration coloniale française, notamment par l'appui politique sur cetains cheikh, par la mise en place d'infrastructures de communication et de commercialisation (voie ferrée, pistes de collectes, points d'eau...).

Ainsi l'espace muriid s'est- il organisé d'abord autour de Tuuba, la capitale. Cette ville de 40.000 habitants environ, dominée par son imposante mosquée (la plus grande d'Afrique, avec le minaret le plus haut du monde- 86,60 m), est le centre de décision de cet espace.

A un niveau inférieur se situent les fondations intermédiaires de premiére génération, créées soit par des frères d'Amadou Bamba soit par ses fils, soit par ses muqadam. A ce miveau se situent les daaru- centres comme Daaru Musti (deuxième grand centre du Muriidisme, pour ainsi dire, créé en 1912 par le frére de Serifi Tuuba, Ceerno Birahim Mbakke), Daaru Marnaan, Daaru Salaam, Daaru Xafoor, Daaru Rahmaan; les villages- centres de Ndaam, Jede, Ndindy, Missira.

A un troisiéme niveau se situent les fondations intermér diaires de seconde génération. Celles- ci sont nées et ont accompagné le monvement de colonisation arachidière des Terres Nouves des franges orientales du Bassin arachidier (voir Polissier, 1966): Villages située entre la haute vallé du Siin et la voie ferrée Thiès- Kayes, comme Saajo, Kolobaan, Nibi, Mboss, Mbar.

A un niveau inférieur se situent les fondations élémentaires de culture. Celles- ci sont en général de petite taille (quelques dizaines d'âmes), de composition presqu'exclusivement masculine.

Sur la base, donc, de techniques traditionnelles tropicales au service d'une culture commerciale d'introduction contempoaine (l'arachide), la confrérie muriid s'est créé un Véritable espace géographique doté d'une très forte personnalité. Malgré la lancée effrenée dans la spéculation arachidière génératrice de destructuration pédologique et de dégradation forestière, elle a su façonner un espace (dont il serait long ici d'analyser tous les aspects) inachevé certes, mais relativement bien structuré.

Plus au Sud en Haute Casamance un autre groupe confrérique s'est lancé

dans une conquête pionnière d'une grande envergure et à partir du village- centre de Madina Gunaas.

b) L'espace gunaasien. C'est l'espace agricole polarisé par Madina Gunaas et dont l'essentiel se situe dans l'arrondissement de Bonkonto (département de Velingara, région de la Casamance).

Installé à Madina Gunaas 1935, le Ceerno Mamadu Saydu Ba a très tôt et très rapidement attiré de nombreuses familles de Haalpulaaren (ceux qui parlent le pulaar comme les peul et les tukuler). Celles- ci sont origimaires principalement de la moyenne vallée du Sénégal et de l'Est de la Guinée- Bissau (Gaabu).

C'est cette immigration qui a assuré et assure encore de nos jours le succés de la conquête pionniére d'une région forestière, sous- peuplés, sous- équipée et économiquement enclavée.

Ici aussi, le contexte de l'économie arachidière a été très favorable. C'est cela qui explique, avec l'accroissement démographique, la sortie du groupe de son recueillement originel.

Progressivement, et à la faveur de l'extension de la culture de l'arachide en Haute- Casamance à partir des années 1940, le groupe confrérique s'est déployé dans la région. Ni la végétation forestirère, ni les fauves, ni les maladies endémiques (lèpre, onchocercose, bilharziose, paludisme), ni les affres de l'isolement n'ont pu avoir raison de ferveur religieuse des disciples ni des nécessités insistantes de l'éoonomie monétaire triomphant. "Une seule voie, une seule voix, une seule communauté", telle a été la devise.

Ainsi les fondations secondaires se sont- elles multipliées, d'abord autour de Madina Gunaas sous forme de villages de culture, ensuite vers la périphérie. Beaucoup de petits villages déjà existants ont été intégrés dans le système spatial gunaasien.

A partir des années 1960 l'immigration et le peuplement se sont intensifiés à nouveau. Les tournées plus fréquentes et plus longues (ensemble du Sénégal, Gambie, Mauritanie, Guinée) du Cheikh ont élargi l'audience du groupe et son assise géographique. En outre la guerre de libération de la Guinée- portugaise (actuelle Guinée Bissau) a fait venir beaucoup de réfugiés- adeptes. Enfin l'élargissement de la culture de l'arachide et surtout la pénfration plus massive de celle du coton ont permis l'absorption de cette importante force de travail disponible.

L'efficacité discrète de l'alliance de la ferveur religieuse et de l'esprit d'entreprise a permis la création, ici aussi, d'un espace islamo- géographique original.

Ainsi nous avons à travers ces deux exemples, tenté de dégager dans un contexte sénégalais les grandes lignes de l'interaction fait islamique et espace rural. L'islam est en définitive une composante essentielle de l'espace rural sénégalais, en raison non seulement des décisions et motivations qu'il impluse, mais

encore du cadre et des moyens d'action sur le milieu qu'il off re à des disciples cherchant sans cesse à s'intégrer dans l'économie nationale. Il faudrait souligner, du rest, dans un autre contexte, la part prise par les confréries dans les économies urbaines, excellent sujet que nous reprendrons ailleurs.

La marque géographique des confréries islamiques se lit par ailleurs dans la toponymie.

2. Le foisonnement toponymique:

La toponymie est un révélateur de choix de la marque confrérique dans l'espace rural sénégalais. La conquête répétitive de l'espace par les différentes confréries a laissé des trames très sélectives de toponymes. Nous soulignerons très simplement trois types, mieux trois styles; le style muriid, le style gunaasien et le malikien.

L'espace muriid est ponctué par des "daaru" et des "tuuba" : Daaru Musti, Daaru Rahmaan... etc... (voir plus haut), Tuuba Mbakke, Tuuba Faal, Tuuba Bogo, Tuuba Belel, Tuuba Gede, etc... Lecaractère pionnier et l'affirmation de la spécificité confrérique s'y strouvent bien exprimés.

Le style gunaasien est plus tourné vers le prosélytisme et la rigueur sunnite: Madina, Daibatu, Usfala, Ukaza, Aynemadi, Rabat, Abissamaghuni. La tradition tijaaniyya omarienne dans la continuité sunnite, telle est la signification profonde de toute la toponymie gunaasienne.

La tradition tijaaniyya est plus affirmée dans le style malikien. Les tijaan de Tiwawone privilégient dans leurs fondations rurales les toponymes tirées des pays d'origine même de la confrérie: plus que chez les autres beaucoup de Madina (ou mérina) et de Missira, mais surtout de Faas (Fès), Aynémadi (Ain Mahdi).

III . Confréries et problèmes actuels d'organisation de l'espace rural

L'influence des "marabouts" (chefs religieux) est présent encore d'une certaine manière dans beaucoup de décisions et d'actions politiques relatives à l'espace géographique rural: administration et gestion, implantation d'équipements divers, modernisation rurale...

1. Dans les domaines législatif et réglementaire:

L'avancée pionnière des muriid en direction des Terres Neuves a suscité, par exemple, des mesures de limitation de la consommation agricole des terres. La multiplication des forêts classées en a été l'expression la plus visible. C'est ainsi

que le front a été stoppé dans son ensemble et que l'avancée pionnière s'est réduite en une série de digitation axée sur les vallées supérieures du Siin et du Saalum d'une part, sur la voie ferrée Thiès- 'Kayes, d'autre part.

Il faut noter que ces mesures n'ont pas souvent été rigoureusement appliquées. C'est ainsi que pendant les années 1960, la pression maraboutique (qu'elle vînt des muriid ou tijaan) a amené l'administration sénégalaise à déclasser des forêts au profit de certains cheikh politiquement utiles.

2. Dans le domaine des équipements, de même, l'organisation confrérique muriid a récupére beaucoup d'équipements destinés soit à l'agriculture soit á l'élevage. L'exemple dos forages profonds en est le plus intéressant.

Les forages ont été créés, surtout après la deuxième guerre mondiale, en vue de résoudre d'abord le problème de l'alimentation des nombreux troupeaux du Sénégal septentrional, principal domaine d'élevage du pays habité en majorité par les peul. Ils ont été implantés en général le long des axes de migration saisonnière des pasteurs, axes qui sont en méme temps suivis par les principaux courants commerciaux. Ce réseau n'a pas tardé à attirer les pionniers muriid malgré l'insuffisance et l'irrégularité des pluies (moins de 500 mm d'eau par an).

Plus au sud, dans le domaine agricole proprement dit, depuis la région de Louga jusqu'au saaloum oriental, la construction des forages a été plutôt une incitation et en même temps une technique de canalisation de l'action pionnière muriid, Les principlaes daaru intermédiaires sont équipées de forages profonds (Daaru Musti, Ndaam, Saajo, Taif, Mbar, Kolobaan, Mboss...).

3. Dans le domaine de la modernisation rurale, pratiquement la ou les politiques officielles s'appuient toujours sur le marabout influent pour vulgariser et diffuser ce qu'on appelle ici en termes technocratiques les thèmes du progrès techmique moderne: mécanisation, utilisation de produits d'intensification agricole etc... C'est ainsi que dans le Bassin arachidier en général la diffusion des grands moyens de production s'est souvent arrêtée dans les villages-centres de résidence des cheikh. L'analyse du rôle économique de certains chefs religieux serait longue à faire ici, mais mérite d'être signalée... et du faire l'objet d'études critiques plus fécondes que beaucoup de clichés actuellement agités par certains chercheurs expatriés.

Conclusion: La modestie de cette contribution n'est sûrement pas à la mesure de la richesse des problèmes que nous venons d'évoquer. Nous retiendrons en définitive que le Sénégal est, en Afrique de l'ouest, l'un des terrains les plus riches pour la géographie religieuse, la géographie islamique en particulier.

La puissance et la longue durée d'exercice du pouvoir christiano- colonial

n'ont pas endigué l'ample déploiement de l'Islam confrérique au Sénégal. Celui- ci façonné le milieu géographique. La géographie humaine sénégalaise lui est redevable de beaucoup de caractères et de thèmes de recherche. Il en a été et il en est de même pour la sociologie rurale, etc... puissent des études et recherches interdisciplinaires s'y intéresser davantage, afin de revoir beaucoup de "choses", beaucoup de clichés et de points de vue européocentristes qui brillent encore par leur subjectivisme religieux bien dosé.

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PROBLEMES DES OASIS TUNISIENNES

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PROBLEMES DES OASIS TUNISIENNES

En Tunisie, de grandes étendues de terres ont un climat desertique. Au Sud des chaines de Gafsa, les moyennes pluvimétriques annuelles sont inférieures à 150 mm. L'agriculture en sec est très aléatoire et seule l'irrigation permet l'existence de ces ilots de culture permanente que sont les oasis et dont la superficie totale est d'environ 29.000 hectares.

I Ressources en eau et équilibre ancien des oasis:

- Les nappes:

La gamme des oasis est variée, mais l'origine de l'eau utilisée pour l'irrigation est partout la même: elle provient des nappes souterraines plus ou moins profondes dont l'exploitation est organisée selon des techiques et des méthodes diverses.

A l'ouest, les sources de la région de Gafsa- Lalla jalonnent la seuil hydraulique de Gafsa qui est sur l'emplacement d'une faille de direction sensiblement NW- S. E. La faille coincide avec l'escarpament auquel elle a donnè naissance et au bord duquel apparaissent les sources. Celles- ci constituent les emergences d'une nappe contenue dans les terrains mio- pliocènes sablo- argileux, surmontant les calcaires du Cènomanien (Crètacé).

Dans le Jerid la nappe exploitée se trouve dans les couches sableuses du Pontien (Pliocène superieur), recouverts le plus souvent par une couverture argileuse qui maintient la nappe captive. Celle ci se trouve à faible profondeur au pied du Flanc Sud du "dhrâa et Jerid" (ondulation anticlinale de direction SSW- NNE) ou elle apparait en plusieurs sources relativement abond antes qui alimentent les oasis de Tozeur, de Nefta, d'El ouiediène etc, ou par artesianisme comme en bor dure du Chott El Jerid.

De part et d'autre de l'anticlinal de dhrâa el Jerid, elle est plus profonde, les forages l'attaignent à une profondeur variant entre une centaine de mètres et 600 à 700 mètres.

La nappe exploitèe dans le Nefzaoua (région située à l'Est et au SE du Chott El Jerid) est la même que la précé dente. C'est la nappe du "Complexe Terminal"; mais elle se trouve dans des formations différentes de celles du Jerid. Les terrains aquifères du Nefzaoua sont ceux du Campanien et du Turonien (Crétacé).

La nappe est à faible profondeur (60 à mètres). Elle apparait en de nombreuses sour ces, puits artésiens et forages.

La sous- sol du Jerid et du Nefzaoua, recèle un autre niveau aquifère important, celui du "Continental intercalaire", qui est beaucoup plus profond que le niveau précédent (plus de 1500 mètres de profondeur). Il se trouvr dans les grés du Crétacé inferieur. Ce niveau très riche est atteint en de nombreux points dans le bassin Nord du Sahara, Mais il n'est guère exploitè dans le Jerid et le Nefzaoua ou toute l'eau utilisée pour l'irrigation provient de la nappe du Complexe terminal.

Dans la partie septentrionale de la Jeffara, le groupe des oasis de Gabès s'etend le long du littoral sur une distance de 50 Kms environ. Il est alimentè par une nappe qui se trouve dans des terrains d'age varié: sables continentaux de Mio- Pliocèns au Nord de Gabès, calcaires du Sénonien au Nord et au Sud de Gabès, El Hamma, Mareth; calcaires dolomitiques du Turonien près d'El Hamma.

La qualité des eaux qui alimentent les oasis du Sud tunisien est très variable. Les plus douces sont celles de Gafsa (moins de 29/L) Elles sont moins chargées que les eaux du Jerid ou les teneurs en sels varient du 1,5 à 29/L à Tozeur, et El Ouiediene, à 39/L à Nefta.

Dans le Nefzaoua les eaux sont de trés bonne qualité au Sud, dans la région de Douz ou le taux de salinité est compris entre 1 et 1,59/L. Cette teneur augmente vers l'Ouest et vers le Nord: près de Kebili, elle atteint 1,6 à 2,39/L et à Fatnassa (extrémité Nord du Nefzaoua,) 3,5 à 49/L.

Dans la région de Gabès l'eau est de qualitè médiocre. La teneur en sel des eaux des sources et des forages s'elève à 2,8 9/1 voire même 3,5 9/1. L'eau est de meilleure qualité seulement à Kattana et à Mareth ou le residu sec est de 2,5 à 2,79/1.

- La variété des activités et des ressources pendant les poriodes de prospérité (XVIII[e] siecle)

Depuis les temps les plus reculés de l'Histoire, ces ressources en eau ont permis sur un espace trés reduit, le développement d'une agriculture pérenne dont le caractère intensif n'avait pas de pareil dans aucune autre région de le Tunisis.

Au cours de la rériode de prosperité de la fin du XVIII[e] siecle l'organisation du système de production agricole et l'équilibre des rapports entre les oasis et l'exterieur ont permis le développement d'une économie hautement integrée dans laquelle les activités extraagricoles, artisanat et aussi commerce jouaient un rôle considérable[(1)].

(1) Hammouda Ibn Abdelaziz: "Attarikh El Bachi" Manuscrit à la Bibliothèque nationale de Tunis.

La structure des trois strates qui forment la couverture végétale de l'espace tel qu'il était amenagé autour des points d'eau, reflètent l'intégration des divers secteurs de l'économie oasienne et l'équilibre réalisé entre les activités agricoles d'une part et les activités artisanales et commerciales d'autrs part.

La strate arboricole supérieur, est on le sait, celle du palmier- dattier qui protège de ses longues palmes, les familles de cultures sous- jacentes des effets nocifs des radiations solaires et des cents. Cette strate comporte elle- même un nombre considérable de variétés de palmiers pas moins de soixante dix dans les oasis du Jerid- dont les caractères étaient étroitemont liés à la nature des sols, aux disponibilités en eaux, aux conditions du climat etc.... Une partie de la production des palmiers était consommée par les populations des oasis; la variété degla n'ayant guère la préeninence qu'elle a acquise dans les oasis du Jerid et du Nefzaoua, à l'époque actuelle. Mais les dattes de ces régions surtout celles que l'on pouvait conserver et transporter (l'AKhouat, El Kintichi, El Allig,) faisaient aussi l'objet d'un commerce permanant et florissant. Elles étaient commercialisées dans tout le pays et dansl'Algerie orientale voisine(2). Il n'est pas étonnant que les oasis qui ont connu à l'époque médi évale, en particulier, la richesse et la prospérite, sont celles qui produisaient des dattes marchandes; en particulier les oasis continentales du Jerid favorisées par ailleure par l'abondance et la qualité de leur eaux.

La strate moyenne, celle des arbres fruitiers qui acquiert une grande importance dans les oasis de l'Aradh (Gabès et satellites) est composée elle aussi d'une gamme tres variée d'espèces. Il n'est pas exageré d'affirmer que toutes les variétés d'arbres fruitiers de la zone méditerranéenne sont representées dans les oasis à l'ombre des palmiers: oliviers, agrumes, vigne, abricotiers, pèchers, grenadiers, cognassiers, pommiers, etc. A Gafsa, l'oléiculture est l'activité essentielle; la production d'huile était en grande partie autoconsommée, mais des quantitées importantes en étaient vendues aux populations d'éleveurs semi- nomades des Steppes qui venaient s'approvisionner dans l'oasis.

La strate inferieure comprend elle aussi un nombre considérable de cultures qui devaient subvenir à la totalité des besoins de la famille; cultures annuelles essentielles comme les céréales (blé, orge, sorgho) toute la gamme des cultures maraichère, primeure et de saison (tomates, piments, cucurbitacées etc...), des cultures fourragères (luzerne, orge en vert, vesce etc...) et aussi les cultures industrielles canne à sucre, hennè, coton, tabac, indigo, etc...) Cette production assurait non seulement la satisfaction des besoins alimentaires et sanitaires (plantes pharmaceutiques) du groupe, mais, aussi permettait un artisanat qui

(2) Ibid

était trés prospère. Cet artisanat était lié non seulement à la production des fibres végétales locales, mais aussi à la laine des moutons des proprietaires oasiens et ceux des Steppes et du Sahara.

La variété des produits artisanaux fabriqués par les populations oasiennes était très grande et les produits qui étaient faits à partir du coton et de la laine étaient sans doute les plus réputés. Ils sortaient des mains des jeunes filles et des femmes et donnaient lieu à des transactions qui mettaient en jeu des Sommes considérables. Les produits artisanaux des oasis étaient commercialisés dans toutes les régions du pays et procuraient des profits substantiels à toutes les familles oasiennes. En 1864, par exemple, le Jerid exporta par le port de Sfax, des produits de son artisanat textile d'une valeur de 300.00 franc(3).

Les diverses activités agricoles étaient ainsi étroitement integrées aux activités artisanales(4) et celles- ci alimentaient les flux d'échanges établis entre les oasiens et les pasteurs- qui, comme dans la Nefzaoua possedaient des oasis entières, d'une part, les oasiens et les populations rurales et urbaines des autres régions du pays et de l'Algerie orientale, d'autrs part.

Ces flux d'échanges étaient assurés par les caravaniers des steppes et par des commerçants Sfaxiens, qui effectuaient le transport des produits qui partaient des oasis ou qui y convergaient(5).

Jusqu'á la fin du XVIII^{s} siécle, les flux comprenaient aussi le commerce de l'or, de l'ivoire, des plumes d'autruche, des esclaves(6) etc... qui faisaient la richesse de certaines oasis comme Tozeur et Nefta. Mais Jusqu'à l'époque contemporaine la diversité des activités les rapports fructueux établis entre les oasis et leur vaste hinterland permettaient la relative prosperité des cités oasiennes, et ce malgré de sensibles inégalités sociales qui existaient au sein de leur communautés.

II la crise de l'économie et de la sociètè oasienne:

Les calamités de toutes sortes (famines, épidemies de cholera, exactions fiscales des pouvoirs publics etc...) qui ont frappé la population tunisienne au

(3) L. Valensi; Fellahs Tunisiens. L'économie rurale et la vie des campagnes aux XVIII^{e} et XIX^{e} siécles. Lille 1975 P 333.

(4) Pellissier et Desfontaines. Description de la Régence de Tunis. III P 72.

(5) Mohamed Taleb Ibn Elluri: "La situation économique et sociale à Tozeur dans la deuxième moitié du XIX^{s} siècle (1880 - 1856). memoire de Certificat d'Aptitude à la Recherche reonotype 1977. Faculté des Lettres et Sciences Humaines de Tunis.

(6) Docteur Luis Frank. Tunis Description de cette Régence (1816) dans l'Univers. (Histoire et Description de tous les peuples). Paris Firmin- Didot 1862.

XIX^{e} siècle et en particulier dans sa deuxième moitié ont été l'amorce d'un processus de desintégration de l'économie oasienne dont l'équilibre a été totalement rompu à l'époque coloniale. Les deux fondements essentiels de cette économie, l'artisanat et le commerce ont connu des la fin du XIXe siècle une décadence irrémédiable. L'afflux des produits industriels de l'Europe Occidentale et plus particuliérement de la France provoqua un ralentissement très net des activités artisanales et des flux commerciaux liés à cette activité.

Les flux en rapport avec le commerce transsaharien s'amenuiserent peu à peu et cessèrent les caravanes de chameliers qui animaient les souks oasiens, devinrent de plus en plus rares, puis avec la généralisation des transports par chemin de fer et par camion disparurent.

1 : Diminution des ressources agricoles et deséquilibre persistant des structures foncieres

L'agriculture elle- même se ressentit des bouleversements qui affectèrent l'artisanat et le commerce. Dans la strate inferieure les cultures industrielles qui étaient pratiquées en relation avec les besoins alimentaires et ceux des ateliers de fabrication disparurent aussi.

La pénurie des ressources extra- agricoles, jadis en partie réinvesties dans l'agriculture ne contribua moins à la dégradation de ce secteur.

La finalité de la production fruitière de la strate arbustive supérieure se modifia dans les oasis continentales. Les variétés qui faissaient l'objet de transactions traditionnelles se déprécièrent au profit de la deglat- nour, variété minoritaire dans toutes les oasis, mais demandée par les exportateurs. Le nombre de pieds de palmiers- dattiers de cette veriété s'accroit, certes. Dans le Jerid où le climat est favorable, il passe de 3,5% en 1853, à 31% du total des palmiers-dattiers en 1972. Mais cet accroissement profita essentiellement á la catégorie des gros propriétaires disposant encore de ressources extra- agricoles, et capables d'attendre 10 à 15 ans pour tirer parti de la reconversion opérée sur leurs exploitations[7]. Les clivages sociaux persistent avec cette évolution et ne cessèrent de s'accentuer au fil des ans.

La terre et l'eau dans les oasis se concentrent entre les mains d'une minorité de propriétaires généralement absentéistes.

Dans les oasis de Gafsa et du Jerid, les exploitations de plue de 2 hectares ne constituent que 11% du nombre total des exploitations, mais elles, couvrent 39% de la superficie irriguée. par contre, les petites exploitations de moins de 1

(7) Attia (H). Modernisation agricole et structures sociales. Exemple du Jerid R.T.S.S. Fev. 1965 No PP 59 á 93.

ha qui representent 74% de la totalité, ne s'étendent qu'à 35% seulement des terres irriguées[8].

Dans les oasis de Nefta, où l'inégalité dans la répartition de la propriété foncière apparait relativement moins grande, les exploitants de plus de 3 ha qui ne forment que 7,12% du total detiennent plus de quart (26,39%) de la superficie irriguée de l'oasis.

Catégories d'exploitations dans l'oasis de Nefta (Jerid)

Taille (ha)	% des exploitations	% de la superficie
0 -0,5	39,39	8,23
0,5 - 1	27,70	29,74
1 - 3	25,79	44,64
- 3	7,12	26,39

Dans l'ensemble des oasis du Jerid les propriétaires qui ont plus de 500 palmiers repesentent en 1962, 9% du total des proriétaires, mais detiennent 54% des palmiers de cettr region[9]. La situation est la même dans l'oasis de Gabès puisque 3,7% des exploitants possèdent plus de quart des superficies irriguées.

Au niveau de l'exploitation est au contraire très poussé surtout chez les petits agriculteurs. Dans le Jerid, les 471 ha des exploitants possèdent moins de 0,50 ha, sont dispersés sur plus de 4200 parcelles.

L'emiettement extrême de la propriété et de l'exploitation a conduit dans un grand nombre d'oasis et en particulier à Gabès à l'abandon de superficies importantes. Les petits propriétaires sont poussés à l'emigration par l'exiguitè de leur propriété qu'ils confient à des Khammes ou qu'ils laissent tout simplement en friche.

La concentration de la propriété, chez une minoritè de familles a pour corollaire un système d'exploitation fondé sur le métayage. A Tozeur 8% seulement des propriétaires travaillent eux- mêmes leurs terres, à Nefta 15%. Dans toutes les oasis, la quasi totalité des proprié taires de plus de 3 ha ne pratiquent pas de faire valoir direct. Ce sont en fait de véritables rentiers du sol. Ceux qui comme à Tozeur et surtout à Nefta, ont entrepris d'améliorer leur système de production (éclaircissement des vergers, utilisation d'engrais chimiques, de produits anticryptogamiques etc..) constituent encors une minorité.

La plupart des grands propriétaires investissent peu dans leurs exploitations situées dans les anciennes oasis; ils prefèrent engager leurs capitaux dans des

(8) Le développement agricole dans le Gouvernorat de Gafsa. Structure actuelle et perspectives. Ministère du Plan. Direction du Plan, des Analyses Economiques et de l'Evaluation des projets. Septembre 1975.

(9) Bechraoui (A) : La vie rurale dans les oasis de Gabès, Thèse de 30 Cycle réonotypée. 1970.

"Sociétés de Mise en Valeur" qui se créent à la faveur de nouveaux forages et de nouvelles extensions.

Dans L'oasis du Jerid, en particulier, le système d'exploitation repose en grande partie sur une main- d'oeuvre jadis servile, aujourd'hui encore misérable: les Khammes appelés pudiquement cheriks. Bien que leur nombre ait sensiblement, dimimué, ces dernières années, la majorité des travaux de l'oasis sont effectués par eux. La diminution de leur nombre a certes accru le rôle du salariat, (à Gafsa en particulier et à Gabès) mais les Khammes qui restent, travaillent aujourd'hui des superficies plus grandes.

Auparavant on employait un Khammes pour 0,5 à 0,75 ha. Aujourd'hui le Khammes travaille une plus grande superficie, d'où un processus d'extensification qui se développe au dètriment de la productivité de la palmeraie et des cultures sousjacentes, le Khammes n'ayant plus le temps de travailler avec soin, les terres qu'on lui confie.

2 - Dègradation des systèmes de production:

L'appauvrissement de la majorité des exploitants agricoles des oasis, lié aux facteurs historiques dejà évoqués, à la concentration de la terre aux mains d'un petit nombre de propriétaires, au morcellement de la petite propriété a pour conséquence une dégradation très poussée des systèmes de production agricole dans les oasis anciennes en particulier.

Ni les petits exploitants, ni les Khammès n'ont les moyens d'amèliorer leur techniques agricoles et d'utiliser les instruments nécessaires à l'accroissement de la production. La majorité des oasis se présentent comme de vieux vergers hirsutes qui engloutissent une force de trevail impressionnante pour une productivité tout à fait insuffisante.

Dans les anciennes oasis qui forment plus des deux tiers de l'espace cultivé de la zone présaharienne, les arbres (palmiere et arbres fruitiers) sont non seulement vieux et même très vieux, mais leur densitè à l'hectare est trop élevée. Dans l'oasis de Tozeur, 61% des palmiers Allig et 39% des palmiers degla ont plus de 50 ans d'âge,[10] dans l'oasis de Gabès 40% des palmiers, toutes variétés, sont dans cette catégorie.

Quant à la densité des arbres par hectare, elle est partout très élevée: 120 pieds à l'hectare dans l'oasis de Gafsa- El Guettar 245 pieds/ ha dans les oasis du Jerid, et sur les petites exploitations les densités peuvent atteindre 520 Arbres/ ha.

(10) Enquête oasis 1976. Ministère de l'Agriculture. Direction du plan des Analyses Economiques et de l'Evaluation des projete- Avril.

Vieillissement des arbres et forte densité à l'hectare sont un facteur important de faible productivité, mais d'autres raisons aussi expliquent de phénomène. La majorité des fellahs n'ont pas les moyens d'utiliser les engrais minéraux, (l'élevage ayant une importance très faible à l'interieur de l'oasis, la production du fumier est tout à fait insuffisante), les pesticides, et les produits de protection contre les chutes de pluies néfastes à la production de dattes pendant les mois d'octobre et de novembre.

Cependant le problème majeur pour toutes les oasis, est depuis quelques decennies celui de l'insuffisance de l'eau nécessaire à l'irrigation des cultures. Dans toutes les oasis traditionnelles, le deficit en eau ne cesse de s'accroitre. Il est évalué à 1255 1/s dans les oasis du Jerid.

Ressources et besoins en eau dans quelques oasis traditionnelles du Jerid[11]

Oasis	Surface (ha)	Q. Eau actuelle (1/s)	besoin (1/s)	déficit (1/s)
Nefta oasis Vieilles	865	479	916	437
extensions	280	548	960	412
Tozeur	1200	370	570	200
El Ouedians	712			

Le débit des sources qui alimentent les oueds (O. Tozeur, Oued Boirre à Nefta, Oued Gabès) à partir desquels s'affectue l'irrigation de l'oasis ne cesse de diminuer, et ce fait est lié à l'accroissement du nombre des forages qui permettent d'irriguer les nouvelles extensions. A Nefta, l'effondrement du débit des sources est dû aussi à l'échec des opérations de captage. De 1961 à 1975 débit des sources dans l'oasis de Nefta est passé de 600 1/s à 314 1/s[12], celui de puits artésiens forés en majurité à l'époque coloniale a lui aussi connu une diminution sensible. Le débit moyen par puits est passé entre 1966 et 1975 de 45 l/s à 17 l/s[13].

Dans la région de Gabès, le débit des sources a été réduit de moitié entre 1950 et 1973, passant de 1400 à 720 l/s.

(11) Source : Etude d'un Schéma Directeur pour l'Exploitation des ressources en Eau et du Sol tunisien, SOGREAH et SOTUETEC. Grenoble. Tunis. Juillet 1974.

(12) Source : Commissariat Régional au Développement Agricole (C.R.D.A) de Gafsa.

(13) Etude d'un Schéma Dorectsur Pour l'Exploitation des Ressources en Eau et en S ol du sud tunisien. Op. Cite.

L'eau des sources du Nefzaoua ne participe plus que pour 11% dans le débit total utilisé pour l'irrigation des ossis.

Débits d'exploitation des nappes en 1973 dans le Sud Tunisien (l/s) [14]

Région	Sources et puits	%	forages artesiens	%	forages Pompes	%	Total
Jerid	1030	50,36	650	31,78	365	17,84	2045
Gafsa	417	68,47	113	18,55	82	13,46	609
Nefzaoua	250	11,	1000	89,	-	-	2250
Gabès	720	26,47	1400	53,67	540	19,85	2720

Cette eau qui est à l'oasis ce que le sang est pour le corps Humain. est très inéaglement repartie, elle aussi: "à Tozeur, le 1/7 de l'Oued (650 l/s) est accaparé par une famille absentéiste d'origine maraboutique. A Nefta... La disponibilité varié selon les jardins de 11/s ha à 0,3 1/s ha [15]".

Le tarissement des sources, la pénurie d'eau et son inégale répartition entre les usagers ont des conséquonces graves pour tout le systéme de production des oasis traditionnelles, en particulier pour les secteurs aval de ces oasis, or le débit disponible est généralement inferieur à celui du débit d'amont.

Les superficies consacrées aux cultures annuelles et plus particulièrement aux cultures maraichères ont régressé très sensiblement dans toutes les oasis. Dane l'oasis de Gafsa, seuls les secteurs proches de la ville où la durée de temps entre deux tours d'eau est inferieure à 7 jours peuvent pratiquer régulièrement le maraichage d'hiver et d'été (10 à 15% de la superficie irriguée) - Les zones plus éloignées du centre ou les tours d'eau varient entre 7 et 28 jours sont vouées à l'olivier moins avide d'eau. Dans aucune d'elles, il n'y a aujourd'hui d'autosuffisance alimentaire. Les produits de base, les céréales en particulier, et sauf à Gafsa, l'huile, doivent être en grande partie acheté de l'extérieur.

Le déficit en eau (les oasis traditionnelles du Jerid disposent en moyenne de: 0,5 1/s/ha) et celles de Gafsa de (0,26 1/à/ha seulement,) est un facteur important de la faiblesse des rendements des strates arbustives de l'étage moyen et sypérieur. Les rendements des palmiersdattiers sont de 13 Kg par arbre en pleine production dans les petites exploitations du Jerid (60 Kg/ arbre en moyenne sur les nouvelles extensions qui disposent de 0,6 l/s/ ha en moyenne).

La production fruitière de l'étage moyen de l'oasis de Nefta est de 120t par an

(14) Ibid.

(15) Attia (H) Art. Cite pp 61 - 62.

en moyenne soit 0,5 tonne par ha, ce qui veut dire qu'un arbre fruitier ne produit pas plus de 5 Kg par an.

La conéquence de tous ces facteurs de dégradation des systèmes de production agricoles dans lesoasis traditionnolles en est une baisse généralisée des revenus de la majorité des exploitants.

La Khammès sur lequel repose une grande partié du système de production dans les oasis du Jerid gagne à peine 100 Dinars tunisiens par an. Les salariés agricoles ont un revenu faible et irrégulié, car ils ne sont pas employés toute l'année. Dans le Jerid, le taux de soue- emploi de la population active masculine est évaluée à 29%.

Le revenu agricole des petites exploitations comblerait les deux tiers seulement des besoins familiaux minima[16].

3 - Déabrement et effrondrement du dynamisme démographique des oasis.

Il n'est dès lors pas étonnant qu'une grande partie de la jeunesse et même un grand nombre de personnes adultes se désinteresse de l'agriculture. Dans toutes les oasis les exploitations abandonnées par leure propriétaires qui ont emigré ou qui s'adonnent à des activités non agricoles dans la région, sont de plus en plusd nombreuses. Les friches sociales prennent chaque année plus d'ampleur, à Gabès en particulier, et le délabrement général s'aggrave, car faute de main- d'oeuvre, l'infrastructure n'est plus entretenue: les seguias sont negligées, le drainage n'est plus assuré d'une maniére satisfaisante. L'eau de drainage chargée sels reste souvent stagnante et maintient ainsi la nappe à un niveau trop élevé.

A Nefta, la nappe de plus en plus polluée de sels se trouve souvent à une mètre de la surface du sol. Près de la moitié de la superficie de l'oasis n'est pas drainée. Les sols sont en maints endroits imprégnés de sel, et leur structure est déteriorée par des phénomènes d'hydromorphie[17].

Les Jeunes scolariés se détournent de l'agriculture et émigrent en masse. Les adultes propriétaires ou non de terres sont eux aussi attirés par le nouvel aldorado lybien, par l'Europe occidentale avant 1973, ou par les villes tunisiennes et en particulier Tunis[18]. Al'exception de Gafsa, le taux d'accroissement annuel des villes oasiennes entre 1966 et 1975 est partout inferieur aux taux d'accroissement national (3,5 5%). Une oasis, comme celle de Nefta, se vide de ses hab-

(16) Développent Agricole dans le Gouvernorat de Gafsa ouv citée.

(17) Dans l'oasis de Gabès, les sols se stérilisent par les retombées des produits toxiques dégagées par les usines des Industries chimiques Meghrebines (J.C.M).

(18) Simen (G) Etat et perspectives de l'émigration tunisienne. Ministére du Plan Tunis 1977

itants. Elle avait 13500 habitants en 1936, elle n'a plus que 12.476 habitants au dernier recensement de 1975[19].

Le taux de croissance au cours de cette période a été de - 0,2%. La conséquence en est un vieillessement très net de la population. Si la tranche d'âge de 15 à 29 ans represente 21,4% de la pouplation tunisienne, elle équivaut seulement à 18,8% de la population du Jerid et 16,9% de celle de l'oasis de Nefta. La tranche de 30 à 59 ans représente 26,7% de la population totale tunisienne, mais 30,6% de celle du Jerid et 32,4% de la population de Nefta en pariculier.

Le cercle vicieux est bouclé: l' agriculture est peu remunératrice et les conditions de travail sont dures et ingrates. L'émigration dirige une grande partie des jeunes vers l'extérieur, l'oasis perd les bras et les cervaux dont il a besoin pour prosperer et tombe dans l'abondon; son infrastructure se détériore; son sol se dégrade, sa productivité diminua à un rythme accéléré et l'on revient au point de départ.

III Les actions de sauvegarde des oasis:

L'Etat tunisien est parfaitement conscient de cette situation. Il s'efforce par, des actions entreprises dans le cadre des programmes nationaux et de la coopération étrangère, d'y remedier. Mais les interventions publiques ont été engagées jusqu'à présent essentiellement dans le sens d'un accroissement des superficies irriguées, d'un réaménagement dans certaines oasis, des systèmes d'irrigation et de drainage, de la diffusion des techniques modernes de mise en valeur dans les extensione nouvelles. La plupart de ces actions sont ponctuelles et ne s'intégrent pas dans une action globale impliquant une réforme des structures.

La cération de grandes exploitations modèles:

Les nombreux forages artésiens et pompes après l'Indépendance, ont permis de créer de nouvelles oasis dans le jerid et le Nefzaoua en particulier. Les grandes exploitations, comme celle de la Société Tunisienne d'industrie Laitière (STIL)[20], pratiquent la monoculture du palmier deglat- nour. Les palmiers sont bien espacés et regulièrement plantés, les méthodes de mise en valeur sont modernes (utilisation d'insecticides, organisation rationnelle de l'irrigation et du draînage). Pour souvegarder l'équilibre écologique, une grande opération d'élevage ovin et bovin a été réalisée: (250 vaches laitières, 2000 brebis

(19) Recensement de la Population et des logements du 8 mai 1975. Ministère du Plan. Institut National de la Statistique.

(20) Grâce à un prêt de la Banque Mondiale la STIL a crée autour des forages une plantation de 500 ha dans le Jerid et une autre de 300 hectares dans le Nefzaoua.

et 60 chamelles de reproduction), une partie des besoins en lait de la région est ainsi satisfaite par l'élevage moderne de la STIL qui entreprit aussi la culture des primeurs (courgettes, ail, tomates, poivrons etc).

Dans la région de Gabès, un périmètre irriguè de 200 hectares a été implanté par l'Office de l'Elevage et des pâturages à Chenchou. Il est voué essentiellement à la culture de la luzerne (100 ha) de la vasco- avoine (30 ha) de l'orge (20 ha) et du tournesol (50 ha). Le périmètre entretient un troupeau ovin de 1100 têtes et constitue chaque année des stocks de foin de luzerne et de vasco- avoine qui sont vendus aux éleveurs pandant la période de disette automnale.[21]

Il est prévu la création sur le périmètre d'un complexe de deshydratation de la luzerne et une unité de fabrication de concentré qui pourra satisfaire une part des besoins du cheptel de la région. Mais le périmètre souffre lui aussi du déficit en eau lié au faible débit des forages (105 l/s au lieu des 200 l/s) et aux pannes fréquentes des groupes diesel.

Dans le Nofzaoua, la réalisation de nouveaux forgages a permis depuis l'Indépendance une extension ininterrompue de nouvelles plantations[22] elles aussi vouées essentiellement à la production de déglat- nour (50% la production).

Bien que les vergers soient en majorité de petite taille 0,5 à 2 ha le morcellement est ici nettement moins poussé que dans les anciennes oasis, car la parcellisation n'a pas encore eu le tomps de produire ses effets. Les reseaux d'irrigation et de draînage sont relativement mieux conçus car ils sont moins complexes et donnent lieu à des conflits peu nombreux.

L'absentéisme des propriétaires est moins fréquent que dans les oasis du Jerid par exemple; la quasi totalité des petits propriétaires participent aux travaux agricoles et la rémuneration des Khammès est relativement plus élevé. En outre l'élevage des moutons, des chèvres des chameaux est parfois important, car un grand nombre de familles qui exploitent des palmiers, vivaient auparavant de l'élevage. Elles conservent encore aujourd'hui un troupeau, tout en s'adonnant à l'agriculture, sur les nouvelles extensions. Cependant si cet élevage contribue à introduire un certain équilibre dans le genre de vir des oasiens, il est responsable d'une forte dégradation du couvert végtal, et d'une sensible extension du desert vers le Nord. Les oasis du Nefzaoua très dispersées, comme les forages artésiens et pompes auxquels ils sont liés sont sous la menace constante de l'ensablement, d'ou les travaux fréquents, effectués souvant par l'armée elle- même, d'endiguement des sables.

Le déficit en eau est en outre dans plusieurs secteurs, très sen sible, surtout

(21) 200 ha sont aussi en cours d'aménagement.

(22) Les oasis modernes couvrent au total près de 1600 ha soit 6% environ des superficies irriguées.

dans la presqu'ile de kebili à cause des extensions sauvages de nouvelles plantations. "Des que de nombreux forages sont crées pour combler le déficit en eau, cette eau est utilisée pour irriguer de nouvelles surfaces au détriment des surfaces existantes dont le déficit n'est pas resorbé"[23]

Ainsi les efforts considérables qui ont été fournis par l'État, et les organismes para- étatiques (STIL, Office de l'Elevage) pour crèer des exploitations modernes ont- ils abouti dans un grand nombre de cas à accroitre le déficit en eau dont souffrent les mêmes catégories d'exploitants, les petits en particulier qui n'ont jamais pu disposer de quantités d'eau suffisantes. les nouveaux forages ont même aggravé l'inégalité. C'est ainsi que dans le Jerid la STIL qui ne possède que 11, 5% des terres irriguées utilise 26% du volume de l'eau disponible "le taux d'irrigation des expoitations de la STIL est en moyenne de 0,6 l/s/ha, tandis que ce taux est d'environ 0,5 l/s/ha pour les exploitations privées..."[24].

Le réaménagement des systèmes d'irrigation et de drainage à Nefta:

L'action des pouvoirs s'est exercée aussi au niveau de l'organisation de l'irrigation et du draînage qui sont régis, on le sait, dans la plupart des oasis par des réglements très anciens (Code d'Ibn Chabbat à Tozeur et à Nefta datant du XVe S.) qui ont la caractéristique de légaliser la répartition inégals de l'eau entre les exploitants.

A Nefta un projet "Irrigation et Drainage" conçu déja en 1966 n'a reçu un commencement d'éxécution qu'en 1975 avec la participation de la République Fédérale Allemande. A l'origine le projet avait pour but d'améliorer à Nefta, la captage des sources, ainsi que le système d'irrigation et de draînage, de procéder à l'eclaircissement de la palmeraie en diminuant la densite des arbres et en enlevant ceux qui sont stériles ou insuffisamment productifs, de remplacer progressivement les variétés de palmiers à faible valeur marchande par des palmiers déglat- nour, ou autres améliorés, de reconstituer la fertilité des sols en grande partie épuisés etc...

Ce projet global devait être réalisé dans le cadre d'un système cooperatif généralisé. Mais après 1969, toute les réformes de structures ayant été arrêtées, on mit en veilleuse le projet qui ne devait être repris qu'en 1975, mais seulement dans sa partie réaménagement hydraulique. Celui- ci permet un accroissement des quantités d'eau nécessaires à l'irrigation: l'oasis disposera en moyenne de 0,52 l/s. (le projet prévoyait initialement 0,72 l/s), une répartition plus rationnelle et plus égalitaire aussi de cette eau: les débits ont en effet

(23) Etude d'un Schéma Directeur pour l'Exploitation des Ressources en Eau et en Sol du Sud tunisien No 1. Ministère de l'Agriculture. Tunis. 1974.

(24) Le Développement Agricole dans le Gouvernorat de Gafsa. V. cite.

quelque peu augmenté pour les petits exploitants qui ont pu accroître de près de 25% la superficie qu'ils consacrent aux cultures maraîchères et de 30% celles qu'ils cultivent en fourrages.

Le nouveau réseau de distribution dont une partie est souterraine est construit en béton. Il évite les perils et les vois d'eau, permet un acheminement rapide et régulier du precieux liquide vers les jardins, impose peu de travaux d'entretien.

Un reseau de draînage est organisé aussi en relation avec le reseau d'irrigation. Il permettra d'abaisser le niveau de la napps et d'évacuer le eaux utilisées.

Mais la nouvelle répartition de l'eau ne tient pas compte suffisamment de la nature des sols cultivés. Les exploitants qui ont des sols lourds (limoneux) et ceux qui disposent de terres légères (sablonneuses) recoivent pratiquement les mêmes quantités d'eau; elle ne tient pas compte non plus de l'état des sols, plus ou moins salés, et enfin elle ne prend pas en considération le niveau d'intensification du systéme de culture: les jardins bien cultivés par leur propriétaires disposent des mêmes quantités d'eau que ceux qui sont à l'abandon ou presque.

Enfin le nouveau système de répartition et de drainage ne resoud en rien les multiples problémes fondamentaux que connait l'oasis à savoir l'inégale répartition de la propriété, le vieillissement et la penurie de la main d'oeuvre et des investissements, l'inaccessibilité la majorite des agriculteurs au Crédit etc...

- **La réorganisation des circuits de commercialisation des dattes.**

A l'aval de la production, les actions d'origine Publique ont concerné recemment, essentiellement la commercialisation de la production fruitiere et en particulier des dattes.

Les producteurs de dégla étaient pratiquement soumis jusqu'en 1974- 65 au monopole de la STIL[25] qui achetait les dattes des agriculteurs aux prix les plus bas.

La commercialisation des produits maraîchers est souvent elle aussi accaparée par un petit nombre de gros commerçants insatiables qui réduisent au minimum les bénéfices des producteurs et qui les découragent.

En 1974 le "Groupement Interprofessionnel des Dattes (G. I. D) dont le Conseil d'Administration comprend représentants de l'Etat et sept représentants des professionnels (agriculteurs, conditionneurs, exportateurs, industriels (STIL) se vit confier la tache d'organiser les divers secteurs d'activité liés à la production des dattes.

Parmi ses multiples attributions (contrôle du fonctionnement des stations de

(25) Ce monopole lui a été enlevé en 1969, mais jusqu'A la création de la TUDAT. La STIL commercialisait la plus grande partie de la production de dattes.

conditionnement, organisation des campagnes de lutte contre les maladies et les parasites, vulgarisation des méthodes de protection des dattes avant cueillette, et d'emballage) la plus importante est sans doute l'organisation et le contrôle de la commercialisation des dattes, la fixation des prix à l'intérieur, et la prospection des débouches extéieurs. Il a contribué à la création de la TUDAT, Société qui grantit le prix minimum fisé par l'Etat et organise l'achat des dattes dans les régions productrices.

Conclusion:

Nécessité et difficultés des réformes de structures.

L'action des pouvoirs publics ponctuelle et sectorielle, s'exerce donc dans le cadre des structures de production actuelles.

Or ce sont ces structures qui constituent l'obstacle principal aux efforts de sauvetage des oasis.

L'inégale répartition de la propriété, l'émiettement de l'exploitation, la fréquence du faire- valoir indirect, et de l'absentéisme, la misère du Khammès et de la majorité travailleurs du sol constituent les problèmes majeurs dont découlent la plupart des autres. Les structures foncieres en particulier, ne permettent pas, à l'heurs actuelle, au petit exploitant d'accéder au crédit. Celui ci est reservé aux investisseurs qui se groupant dans les nouvelles sociétés de mise en valeur dont les adhérents, tous gros propriétaires, on la vu, peuvent obtenir des crédits pour 70% du montant du capital à investir et une subvention équivalent à 20% de ce capital. C'est ainsi que "les riches s'enrichissent de plus en plus, tandisque les pauvres n'ont pas la possibilité d'améliorer leur sort, glissant ainsi de plus en plus vers la pauvreté totale[26]".

Il est vrai cependant que le changement des structures de production n'est pas une entrsprise aisée. Les tentatives de reconversion des oasis et de réforme des structures agraires ont rencontré en 1968- 69 l'opposition de la majorité des propriétaires et des exploitants. "L'ensemble de ces propriétaires, vieux et jeunes, présents ou absents sont unanimes à refuser touts idée de réoganisation de la répartition de l'eau et opposant leure intérets individuels à l'intérêt du groupe[27]".

Le dynamique de la situation actuelle conduit naturellement à une dégradation ininterrompue des systèmes de production dans les oasis traditionnelles et au départ de la majorité des jeunes vers les sectaurs autres que l'agriculture, situés à l'intérieur et le plus souvent à l'extérieur de la région.

(26) (Planification Agricole Régional. Développement Agricole dans le Gouvernorat de Gafsa. Etude évaluative sur le développement agricole de 1 Oasisde Nefta. Doc. de Travail no: 1. Ministère l'Agriculture. Tunis 1975 P 93.

(27) Attia (H). Art. Cite, p 76.

ISLAM: FACTEUR D'EXPANSION AGRICOLE: LE CAS DES MOURIDES DU SÉNÉGAL

PROF. BOCARLY

ISLAM: Facteur d'expansion agricole: le cas mouride du Sénégal

D'une maniére générale, les géographes occidentaux considèrent, à juste titre d'ailleurs, l'ISLAM comme une religion essentiellement citadine.

En effect, nous le savons bien, c'est avant tout, dans les aspects et la vie des cités que l'ISLAM a laissésune empreinte ineffaçable. Pourtan ces géographes occidentaux, en forçant leur raisonnement aboutissent à des conclusions hatives et qui tendent à faire de l'agriculture le parent pauvre de l'ISLAM.

Ne révélent- ils pas que le travail de la terre dans les oasis était par définition servile? Ne soulignent- ils pas que les Hadiths sont animés d'esprit anti- paysan, et que le prophète voyant un soc de charrue aurait dit ".. cela n'entre jamais dans la maison des fidèles sans qu'entre en même temp l'avilissement"..

Au passif de la législation islamique du travail agricole, ces auteurs portent sans hésiter le problème du colonat partiaire, du métayage (mouzaraa) et de façon plus générale, celui de la location des terres. Ils lui font également grief d'avoir établi le principe fondamental de l'éta tisation et de l'inaliénabilité (Wakf, habousd'Afrique de Nord) du sol qui s'est avéré désastreux pour l'organisation de la société rurale islamique.

Il aurait résulté de ce principe le manque de ferment de progrés qu'est la grande propriété d'exploitation directe, une des bases de toute initiative capitaliste. Pour ces occidentaux, ce principe est une des sources profondes de la sclérose économique de l'ISLAM.

Pourtant, ces stéréotypes qui imprimer à l'ISLAM une attitude négative à l'égard de la terre, étaient depuis longtemps battus en brèche en Afrique de l'Ouest. Dans cette partie de notre continent, l'ISLAM avait été depuis longtemps un véhicule fondamental de progrès agricole.

Les témoignages de l'administrateur français chargé des questions islamiques en Afrique Occidentale Française, Paul MARTY sont suffisament évocateurs en ce qui concerne la Côte d'Ivoire, pour être transcrits ici.

".. Dans ce pays, affirme- t- il, si les musulmans y sont surtour des commerçants, leurs cultures, quand elles existent, sont mieux tenues que celles de leurs voisins fétichistes de même race (Malinkés), ils cultivent les céréales (riz, mais, mil, fonio) de préférence aux ignames et par des procédés meilleurs;

Les techniques sont plus perfectionnées, les houes (daba) plus lourdes chez les musulmans; la moisson du riz se fait chez eux à la faucille alors que chez les fétichistes le riz mûr est étêté épi par épi.

Les Dioulas ont développé la culture du coton et son tissage pour les besoins du vétement islamique.."

Après avoir noté le développement par les musulmans du palmier vers le sud de la haute Côte d'Ivoire, et du blé au Niger, il poursuit en montrant que les cultures des musulmans révélent une discipline de travail et une unité de méthode qu'on ne trouve pas chez les animistes.

Malgré ces témoignages de l'adminstrateur français, des géographes et historiens africanistes s'obstinent à nier le rôle positif de l'ISLAM dans l'agriculture africaine. Ainsi, pour Delafosse, qui cite le cas certains Sarakollés, le divorce entre l'ISLAM et l'agriculture est sans rémission même en Afrique. Selon lui, tout musulman qui revient à la terre semble perdu pour l'ISLAM.

Cette conclusion est totalement erronée et l'exemple des mouri des du Sénégal dont le dynamisme agricole force l'admiration et le respect est un cas intéressant qui mérite de retenir l'attention de tout géographe musulman ou non qui s'interroge sur le rôle de l'ISLAM dans la production agricole d'un pays.

Avant de vous parler de l'expansion de l'arachide grâce aux Mourides, qui est notre préocupation essentielle, il n'est pas superflu de vous préciser succintement ce qui sont le Sénégal et le Mouridisme.

1 - Présentation du Sénégal et du mouridisme

a)Présentation géographique de Sénégal:

Finistère Ouest Africain, d'une super ficie d'environ 200.000 Kms 2,le Sénégal est tout entier compris entre le 12°30'N et le 16°30'N Il est ainsi situé dans la zone de climat tropical à longue saison seche qui ceinture le continent africain depuis les lisières méridionales du sahara jusqu'aux approches de la forêt ombrophile. La conséquence fondamentale de sa situation en latitude est que l'activité agricole y est exclusivement conditionnée par les précipitations et que ces dernières sont bloquées sur une unique saison des pluies (4 mois environ de juin à Octobre).

Ces pluies diminuent rapidement du Sud au Nord, Alors que l'extrême Sud reçoit environ 1500 mm, tout le "bassin de l'arachide" qui s'étend de la rive Nord du Saloum jusqu'à la bordure méridionale du delta du Sénégal, ne bénéficie plus que de précipitations inférieures à 800 mm qui vont s'amenuisant jusqu'à 400 mm qui représentent le minimum indispensable aux cultures tropicales les moins exigeantes pour a ccomplir leur cycle végétatif.

D'autre part, il est remarquable que plus les pluies deviennent modestes vers le Nord, plus elles deviennent irrégulières Malgré ces conditions climatiques sévéres, le Sénégal, comme tous les pays Ouest Africains, est une immense paysannerie.

Environ 70% de sa population vit des seules ressources de la terre dans le cadre de civilisations rurales héritières d'une longue histoire cette population sénégalaise est estimée à 5 millions d'habitants d'après le recensement de 1976. Elle se compose de divers groupes humains: les Sérères (19% de la population) qui occupent la région du Sine- Saloum, les Toucouleurs (13% de la population) qui habitent la moyenne vallée du Sénégal, les Peulhs (8%) dispersés sur l'ensemble du territoire mais surtout à l'est du Ferlo, les Diolas, Sarakollés etc...

Mais le groupe dominant est celui des wolofs qui constituent plus du tiers de la population totale, Ce groupe initialement installé au Nord Ouest du pays dans la Cayor, le Baol et le Walo, a essaimé dans la plupart des régions.

C'est parmi ces wolofs que se recrutent essentiellement les mourides dont le nombre dépasse le million et qui sont à la base de l'expansion de la culture arachidière au Sénégal.

L'arachide (arachis hypogaea) exerce sur toute l'économie sénégalaise une écrasante souveraineté. Toute l'activité économique du pays est commandée par la campagne arachidière selon un rythme saisonnier aussi rigoureux que celui imposé par le régime des précipitations à la production agricole.

Couvrant probablement la moitié des surfaces cultivées, l'arachide assure au moins les trois quarts des revenus monétaires du monde rural, Au niveau de l'économie nationale, l'importance des produits arachidiers est aussi prépondérante.

En 1964 (année à laquelle n'avait pas commencé la sécheresse qui sévit depuis 1966), ils représentent 23% de la production intérieure brute et de 75 à 85% de la valeur des exploitations. l'activité industrielle elle- même est largement tributrice de la culture de traite puisque le chiffre d'affaire des huileries atteignait 42% du chiffre d'affaire total de l'industrie sénégalaise. Ces données suffisent à exprimer l'importance de la culture de l'arachide pour l'ensemble du monde rural sénégalais. Mais le phénomène le plus grave pour tout l'équilibre économique est que cette plante reste jusqu'ici la seule qui donne lieu à desséchanges massifs et organisés par l'intermédiaire de l'ONCAD (Office Nationale de Coopération et d'Assistance au Développement). Depuis 1840, date de la première expédition vers la France, jusqu'à nos jours, l'intégration de la paysannerie dans une économie de marché s'est opérée sous la pression de cet unique facteur, le développement de l'arachide. Il en est résulté une évolution prodigieuse de la production parvenant à 100.000 tonnes à la fin du XIXè suècle, la production a dépassé pour la première fois, le million de tonnes dès 1961.

Le premier facteur favorable à la diffusion de l'arachide est, nous l'avons vu, le rythme climatique. Le second facteur concerne les factuers pédologiques

puisque le Sénégal possède des sols très meubles souvent sablonneux. Toutefois, les facteurs humains n'ont pas été moins propices au prodigieux succès rencontré par la culture de l'arachide. Le plus décisif a été sans doute la prédilection que les mourides ont attachée à cette culture. Définissons ce mouridisme et voyons comment il a pu intervenir comme facteur d'expansion agricole.

b) - Aperçu sur le mouridisme au Sénégal

1°- définition du mouridisme

Au Sénégal, les mourides sont les adeptes de Amadou Bamba.

Il n'est pas dans notre intention d'analyser la confrérie comme voie religieuse et d'étudier ses rapports avec les ordres auxquels la rattache la chaine mystique de son fondateur.

Bornons nous à signaler que pour bien comprendre le mouridisme, il convient d'abord de garder en mémoire les circonstances historiques qui ont présidé à sa naissance. Ainsi Amadou Bamba a pû objectivement apparaitre à la société wolof du XIXè siècle, comme l'héritier de la monarchie du Cayor. A bien des titres, la confrérie qu'il a fondée a pris le relai de l'organisation wolof traditionnelle dont les méthodes d'encadrement ont été largement transposées du plan politique au plan religieux, Mais il serait faux de voir simplement dans le mouridisme un sorte de mouvement patritique wolof.

Le mouridisme a déjà fait l'objet de nombreuses études de la part des non-africains. Dès le début, certains d'entre eux, plus ignorant que malintentionnés, mais possédant les deux défauts, ont voulu voir, dans l'apparition du Mouridisme, la naissance d'une "secte", c'est- à dira " d'un ensemble de personnes qui se sont détachées d'une communau té religieuse, entrainées par une idéologie plus ou moins sectaire".

Ces interprétations du mouridisme sont totalement fausses. Comme le constatent des chercheurs aussi sérieux que Fernand Dumont et Pélissier: "Le mouridisme est fondamentalement d'essence religieuse ce qui confère à sa hiérarchie interne une rigueur et une efficacité que n'avaient pas les anciennes structures politiques, Les sources du mouri disme sont avant tout d'ordre doctrinal. Elles résident dans une interpré tation du Coran dont Amadou Bamba et ses successeurs ont tiré un certain nombre de règles de vie auxquelles leurs adeptes acceptent de se soumettre".

Cette confrérie musulmane orthodoxe s'est inspirée de certain principes qui

ont eu un retentissement direct sur son rôle géographique, tant dans le développement et la marche du front pionnier que dans l'orginisation actuelle des régions qu'il a le plus efficacement contribuées à annexer au domaine de l'agriculture. Examinons rapidement les principes du mouridisme.

2°- Les principes du mouridisme

a) le premier caractère de la voie préchée par Amadou Bamba qui a directement marqué son orientation, est sans doute le mysticisme La vie, l'oeuvre écrite et les prédications du Serigne, sont celles d'un contemplatif. Ce mysticisme se fonde sur une interprétation rigoriste et intransigeante des textes sacrés, ne laissant place à aucune tolérance, à aucune faiblesse. Sa fidélité à la tradition de la sunna éclate à travers toute l'oeuvre d'Amadou Bamba, notamment dans son ouvrage: "les clefs qui ouvrent le paradis et ferment l'enfer".

Au plan géographique, le mysticisme qui impreigne l'ISLAM mouride, a eu et a toujours de profondes répercussions. Nous retiendrons les plus significatives.

La première nous parait être la suivante: le mysticisme d'Amadou Bamba a puissament contribué à faire des mourides de pionniers des défricheurs de fôret vide, soucieux de trouver dans l'isolement et le contact intime avec la nature des conditions propices à la vie intérieure à la méditation et à la prière.

Ce trait ne s'applique pas seulement aux apôtres du début du siècle, Aujourd'hui encore, c'est aux avant- postes du front pionnier que les jeunes mourides reçoivent leur éducation, menant dans des villages une vie ascétique ponctuée par des chants collectifs et des prières nocturnes.

La seconde conséquence de l'accent mystique de la doctrine mouride est la tendance à l'abdication de la personnalité, du moins chez la masse des fidèles. Ce trait rend compte, en particulier, de l'extraordinaire disponibilité qui caractérise le comportement des membres de la confrérie et qui est à la base de son efficacité.

b) la deucième assise de la doctrine mouride est en effet, constituée par totale soumission du disciple à la volonté de son Cheikh, de son guide spirituel. Ce principe de la fidélité absolue du croyant à l'égard de son maitre, serait inspiré de l'attitude dont faisaient preuve ses premiers compagnons à l'égard du Prophète.

L'appliction littérale qu'en font les mourides s'inscrit dans la tradition la plus pure de la société, wolof, coutumière strictement hiérar chisée, cloisonnée. L'application de ce principe assure au mouridisme une cohésion, une discipline et une solidarité qui rendent compte de la véritable fascination exercée par les marabouts de Touba sur le peuple wolof.

C) la troisième originalité doctrinale de la confrérir mouride réside dans l'exaltation du travail, particulièrement du travail de la terre, puisqu'elle a historiquement pris naissance dans une société rurale.

Nous touchons ici à l'un des grands méritres de Bamba: il a saisi que l'homme est une dualité qu'il ne saurait vivre uniquement d'une altitude de contemplation. Aamadou Bamba et ses successeurs ont dénoncé dans l'oisiveté, la source de tous les désordres personnels et collectifs, ont assigné au travail un pouvoir sactifiant, et en ont fait l'instrument essentiel des vertus mourides, Bamba a lancé l'expression devenue prover biale selon laquelle le travail fait partie de la religion (ligey si top yallah la bock) et non qui travaille, prie.

En revalorisant l'activité humaine, Bamba s'inspirait bien de la tradition islamique, car l'ISLAM certainement a une opinion couramment répandue n'a jamais réprouvé le travail.

C'est un géographe portères dont les connaissances sur l'ISLAM sont nulles, qui a écrit: "l'orthodoxe musulmane réprouve foncièrement le travail agricole et d'ailleurs le paysannat".

La valeur spirituelle reconnue au travail contribue à rendre compte du rôle capital joué par le mouridisme dans l'expansion du domaine agricole wolof. Ce travail prend, d'autre part, une exceptionnelle efficacité si l'on souligne qu'il est, dans toute la mesure du possible, communautaire. C'est alors seulement qu'il atteint sa pleine signification et porte, au plan spirituel, tous ses fruits. Conjuguée avec le mysticisme cette exaltation du travail peut représenter la base des entreprises les plus audacieuses, des sacrifices les plus émouvants comme le furent les conquetes des terres Neuves du Sénégal.

II - La conquête pionnière des Terres Neuves du Ferlo occidental par les mourides

Nous distinguerons ici deux aspects: les difficiles étapes de cette conquête d'abord, et les mécanismes par lesquels elle s'est opérée d'autre part.

A - Les principales étaypes de la conquête agricole du Ferlo par les mou - rides

La conquête agricole mouride présente 3 étapes.

1 - le début de la colonisation 1912- 1927.

Après le retour d'exil de Bamba, et sa fixation en défintive en 1912 à Diourbel se situe le point de départ de la conquête des terres vierges du Ferlo. Cette période dure jusqu'à sa disparition en 1927.

Cette première période de colonisation fut exclusivement wolof Les conditions dans lesquelles certains villages nouvellement créés par les mourides durent affronter le probléme de l'eau, transformèrent la tache des pionniers en une aventure héroique dont seules rendent compte la foi ènthousiaste, la solidarité et l'organisation des mourides.

La localisation géographique de cette colonisation wolof mouride semble pouvoir être schématiquement fixée dans deux zones privilégiées.

Le premier secteur correspond approximativement au triangle Diourbel-Touba- Darou Mousti, qui peut- être considéré comme le berceau du mouridisme.

Le second secteur dans lequel se développe l'immigration wolof animée par les compagnons d'Amadou Bamba, a pour axe le chemin de fer qui, partant de Diourbel se dirige vers Guinguinéo, Kaffrine et Tambacounda en cernant le Ferlo par le Sud. En fait, chaque station semée par le rail tous les 25 ou 30 Kilomètres, est transformée en village pris en escale par les disciples de Bamba. A partir de la voie ferrée, ceux- ci n'hésitent pas à se lancer dans la haute brousse du Ferlo méridional, à l'Est et au Nord du chemin de fer.

Cette première période prend fin avec la disparition de Bamba en 1927.

2 - La colonisation systématique des Terres Neuves de 1927 à 1945

Après Bamba, la conquête pionnière du Ferlo occidental redevint le catalysateur du mouvement mouride, le symbole de son dynamisme. C'est avec une ardeur renouvelée qu'à partir de 1932, la marche vers l'Est reprend. Des dizaines de villages sont ainsi semés à travers la brousse, quelques uns à proximité de vieux campements peuls, la plupart au creux de la forét. Les mieux situés et les moins dépourvues d'eau deviennent les points de traite et des centres commerciaux à la demande du Khalife des mourides.

De sadio, sur la haute vallée du Sine, jusqu'à Kaffrine et Koungheul, sur la voie ferrée de Tambacounda, toutes les escales qui, telles Colobane, Mbar, Gnibi, etc.. forment aujourd'hui l'armature du peuplement et du réseau d'échanges, sont des créations mourides datant d'une trentaine d'années.

Cette seconde période de la conquête des Terres Neuves est marquée par différentes initatives officelles dont les résultats les plus durables intéressent, au plan géographique, deux domaines Alertée par l'ampleur du mouvement de colonisation mouride et le succés de l'arachide dans les Terres Neuves, l'administration française s'efforce de bloquer les défrichements, en soustrayant une partie du territoire du Ferlo occiden tal à l'invasion des agriculteurs. Elle répond aussi aux inquiétudes des Peuls qui prennent à la même époque conscience du recul du domaine pastoral. C'est en 1936 que sont délimités, en

avant du front pionnier, d'immenses périmétres transformés en forêts classées et interdits aux défrichements. Ces forêts vont jouer un rôle efficace de frein à la vague pionnière notamment à Déali dans le Djolof, à Mbégné entre le Sine et le Saloun.

Cette seconde phase de colonisation agricole se poursuit jusqu'ei 1945 et s'achève avec la fin de la guerre, la mort du premier successeur d'Amadou Bamba, Mamadou Moustapha Mbacké et l'ouverture d'une troisième période au cours de laquelle différents facteurs, en particulier l'essor urbain, donnent à la confrérie un style nouveau.

3 - Ralentissement du peuplement et stabilisation du frond pionnier depuis 1945.

Depuis une trentaine d'années, le peuplement du Ferlo occidental s'est poursuivi, mais à un rythme très sensiblement ralenti. Les années de sècheresse depuis 1966 ont provoqué une véritable insécurité climatique, cause de nombreux départs vers le Sud. Mais les facteurs humainsont une grande responsabilité dans le ralentissement du peuplement des Terres Neuves et la stabilisation du front pionnier. Le Classement de vastes périmètres forestiers a incontestablement enrayé la marche vers l'Est et incité, en particulier, les mourides à pratiquer des méthodes de culture plus sédentaires. Les terres défrichées depuis le début du siècle sont désormais occupées par un réseau de villages stables ou vit une société paysanne équilibrée, de structure démographique identique à celle des villages de l'Ouest, et non plus par des campements de jeunes pionniers.

D'autre part, la croissance démographique des wolofs a trouvé depuis 1945, un autre exutoire que la colonisation agricole, Le développement des villes, en particulier de Dakar. Or le mouridisme contemporaine est profondément marqué par cette évolution à laquelle il participe.

Enfin, un autre facteur de ce ralentissement est la nouvelle politique de l'eau, Depuis 1948, est mis en place un programme de forages interessant l'ensemble du Ferlo. Les mourides ont profité de la création de ces nouveaux points d'eau, Tous les forages localisés à la périphérie des fôrets classées qui bloquent la marche vers l'Est des défricheurs, sont devenus des foyers mourides. En somme, l'équipement du Ferlo en points d'eau abondamment approvisionnés a orienté et canalisé les déplacements récents du front pionnier qui aujourd'hui encore est très flou.

Son tracé n'est en effet précis qu'au contact des forêts interdites aux défrichements.

Nous venons de voir que le développement de la conquête des Terres Neuves a connu, depuis le début du siècle, trois phases distinctes qui sont marquées par des carctères géographiques vigoureux.

Cette annexion à l'espace agricole d'un domaine considérable a presque doublé la surface du bassin de l'arachide en un demi- siècle. Il est regrettable que les lacunes de la documentation ne permettent pas de fixer avec précision l'importance de la population établie à l'emplacement des forêts du Ferlo occidental.

Indiquons seulement, pour donner une idée de l'ampleur du mouvement de colonisation que, du Nord de Darou Mousti à l'Est du Kaffrine, le domaine agricole balayé par le front pionnier depuis le début du siècle doit rassembler une population de près de 300.000 habitants.

Avant le déclenchement de la marche vers l'Est, c'est probablement à quelques milliers, peut- être à une deux dizaines de milliers que devait s'élever le nombre de pasteurs occupant la même zone. La question qu'il importe de se poser est de savoir par quels mécanismes les mourides sont parvenus à ce résultat.

B- Les mécanismes qui ont permis cette conquête:

L'institution des daras.

Il va de soi que toute action du mouridisme ou inversement sur le mouridisme n'est concevable qu'en raison de la structure hiérarchisée pyramidale de la confrérie depuis la base formée par le million de talibés jusqu'au sommet occupé par le Khalife Abdou Lakhat MBCKE, en passant par ses milliers de Cheikhs, ses hommes de confiance.

Sans nier l'importance d'une analyse de cette organisation générale pour la compréhension de notre sujet, il convient surtout, à notre avis, de mettre en valeur certaines, particularités du mouridisme, notamment une institution qui a joué et qui joue toujours un rôle essentiel dans l'efficacité géographique du mouvement, celle des daras.

Au sein de la masse des talibés, une partie des jeunes gens reçoit une formation spéciale que son dévouement, sa disponibilité, son enthousiasme mettent à la disposition des marabouts.

Ces jeunes, en wolof, les "tak- der", à cause des ceintures de cuir très larges qu'ils portent, ont quitté leur famille pour rejoindre un Cheikh, ou bien ont été confiés à celui- ci sur l'initiative de leur père. Agés généralement d'une quinzaine d'années, ils restent au service de leur protecteur jusqu'à leur mariage. Une partie seulement de ces jeunes Tak- der demeure dans l'entourage immédiat du Cheikh; la majorité d'entre eux est constituée en équipes vivant dans des installations isolées des villages: les daras.

Il faut voir l'origine de ces daras dans la première école coranique ouverte

par Amadou Bamba à son retour d'exil. Il avait fait de cette école un lieu de formation religieuse et humaine puisqu'il invitait ses adeptes à lire le coran, mais à travailler également. Ainsi le dara est à la fois une école de brousse pour l'éducation coranique et la formation morale des jeunes talibés, et un camp de travail austère ou règnent un ordre et une discipline sans faiblesse.

Le dara représente une concession qui, généralement, se situe à l'intérieur d'un terroir. Sa superficie est variable de 20 à 30 hectares en moyenne, Le Dara est placé sous la direction d'un responsable, homme de confiance du marabout, nommé Diawrigne. Ce dernier est le délégué du Cheikh. Recruté parmi les fidèles les plus dévoués du marabout, c'est généralement un cultivateur expérimenté, d'une activité exemplaire mais d'âge mur. Ses fonctions sont doubles: il est aussi bien instructeur en science coranique et animateur des exercices religieux qui rythment les heures du dara, que chef du chantier responsable de la vie matérielle et surtout du travail des talibés qu'il a en charge. Ces derniers mènent une vie de spartiate dans le dara où la seule loi est celle du travail et de l'étude du Livre Saint.

Sans ressources, ils sont entretenus par le marabout à qui revient également le soin de faire face aux charges coutumières lors de leur mariage.

Le dépouillement matériel des membres du dara, leur attachement à l'égard de leur Cheikh, leur sens du travail communautaire et leur discipline en font le véritable fer de lance de confrérie, notamment des fondation pionnières.

Le dara est toutefois une institution mouvante, puisqu'elle peut se transformer en village en veillissant.

Il résulte de cette évolution, qu'on peut considérer aujourd'hui la phase pionnière a été dépassée dans le berceau du mouridisme ou les daras ont disparu pour aller s'implanter dans les zones pionnières. Dans ce vieux secteur mouride, l'agriculture sédentaire s'est implantée. les terres y sont occupées par un réseau de villages stables ou vit une population paysanne équilibrée de structure démographique identique à celle des localités de l'Ouest.

Dans ce secteur les propriétés maraboutiques sont devenues des champs d'expérience ou se déroulent d'interessants efforts de rationalisation. C'est le cas des domaines de Touba Bogo, Taif etc..

L'une des plus anciennes de ses expériences, est réalisée à Darou Rahmane par Abdou Aziz MBACKE dès 1939 1940. Profitant de l'existence d'une série de dépressions établies sur le tracé d'anciens affluents du Sine où l'eau reste en permanence accessible, il a créé des plantations et des jardins irrigués. Sous le couvert des manguiers, des agrumes, des roniers, les dépressions interdunaires portent une étonnante collection de légumes tropicaux et, en saison sèche, de légumes européens.

Conclusion

Il est temps de conclure.

Contrairement à ce qu'ont pu écrire certains géographes comme Xavier de Planhol dans son ouvrage "le Monde islamique, essai de géographie religieuse P.U.F. 1957".

l'ISLAM n'est pas anti- paysan. Le mouridisme du Sénégal que nous avons rapidement étudié leur a apporté un sérieux correctif.

Les adeptes de cette confrérie en se lançant dans la mise en valeur des Terres du Baol du Djolof, du Sine appartenant à la société sénégalaise de son temps une contribution déterminante dans le développement de la production agricole surtout arachidière. Les résultats auxquels sont parvenus les mourides trouvent leur explication dans l'extraordinaire efficacité de l'organisation de leur confrérie.

Ni les équipements mis en place par les autorités administratives ni le succés de l'économie mercantile basée sur l'arachide, ne peuvent à eux seuls rendre compte de l'ampleur et de la rapidité de la colonisation du Ferlo occidental. Cette frange orientale du bassin de l'arachide offre l'exemple d'une société puisant dans une interprétation originale de l'ISLAM les sources d'une organisation qui a déculpé le remarquable expansionnisme territorial manifesté par les wolof tout au long de leur histoire.

Cette société mouride est parvenue à de tels résultats que même les penseurs dont les critiques à l'égard de l'afrique sont unanimement reconnues n'ont pas manqué de souligner son rôle positif en ce qui concerne le développement agricole. Ainsi René Dumont, dans "Afrique Noire est mal partie" n'a pas pu manquer de noter en parlant des mourides que: ".. si leur devise Travail, Ordre, Discipline, était effectivement appliquée dans toute l'Afrique Noire, les chances de développement de ce continent seraient considérablement accrues.."





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مركـز البـحـوث

بحـوث
المؤتـمر
الجغرافى الاسلامى الأول

المجلد السادس

أشرف على طباعته ونشره : إدارة الثقافة والنشر بالجامعة

١٤٠٤ هـ - ١٩٨٤م

مطابع جامعة الإمام محمد بن سعود الإسلامية